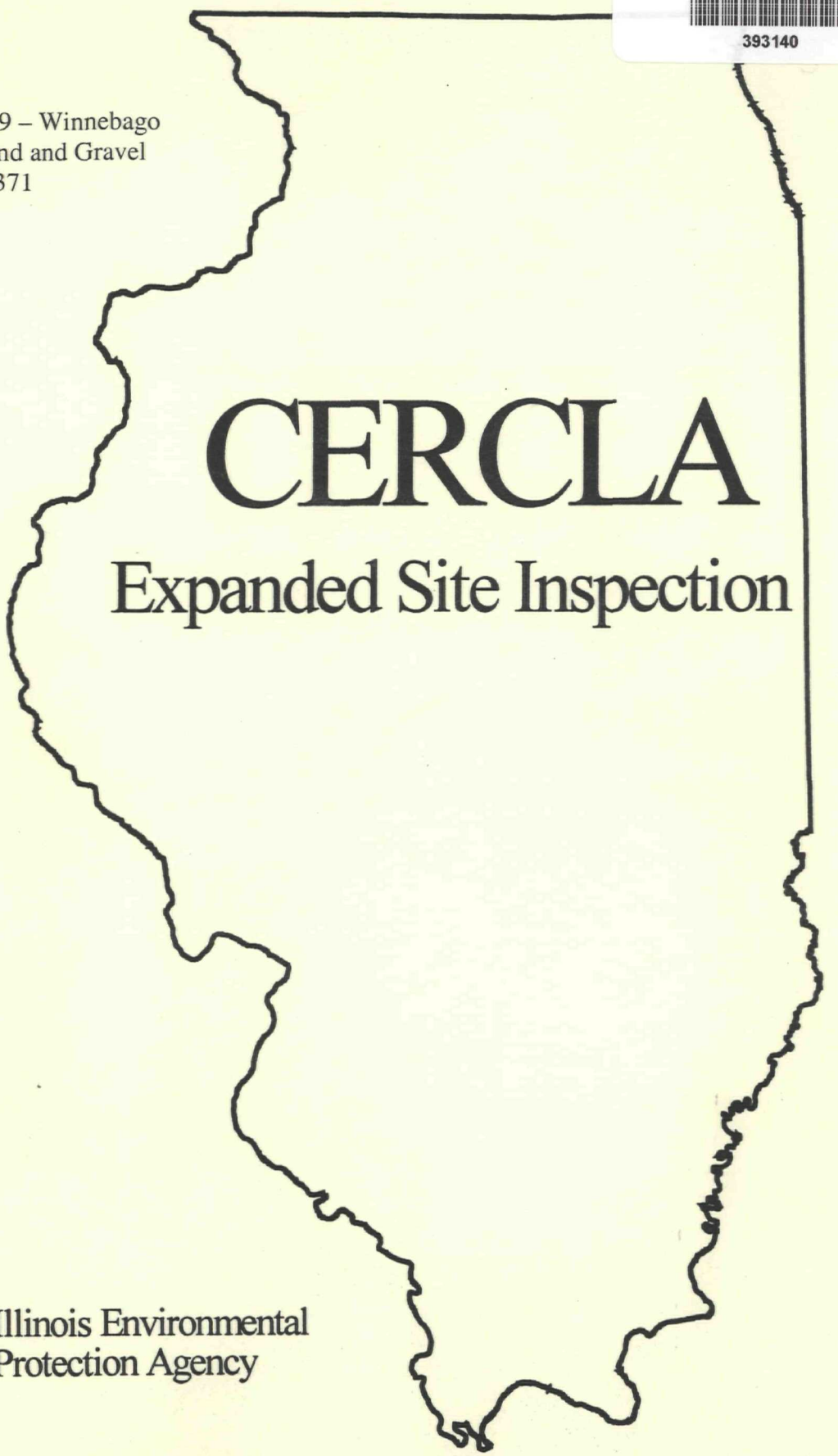
L2010300009 – Winnebago
Rockford Sand and Gravel
ILO 000034371
SF/HRS

CERCLA

Expanded Site Inspection



Illinois Environmental
Protection Agency

CERCLA EXPANDED SITE INSPECTION

for

ROCKFORD SAND & GRAVEL
ILO000034371

Rockford, Winnebago County, Illinois

By

Illinois Environmental Protection Agency
Bureau of Land
Office of Site Evaluation

April 17, 2002

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SECTION 1

SITE BACKGROUND

1.1 INTRODUCTION

On September 26, 2000 the Illinois EPA's Office of Site Evaluation was tasked by the United States Environmental Protection Agency (U. S. EPA) to conduct a CERCLA Expanded Site Inspection (ESI) investigation of the Rockford Sand and Gravel site located at 4002 South Main Street, Rockford, Winnebago County, Illinois. This investigation was conducted under the authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986.

Rockford Sand and Gravel (ILO 000034371) was placed on the Comprehensive Environmental Response, Compensation and Liability Act Information System (CERCLIS) in October, 1993 as a result of a request for discovery action initiated by the State of Illinois. This action was taken due to complaints concerning unpermitted dumping of wastes and the possibility that hazardous wastes may have been illegally dumped during the 1950's and 1960's.

The facility received its initial CERCLA evaluation in the form of research for an Integrated Assessment by the Illinois EPA in February 1994. The sampling portion of the Integrated Assessment was conducted on November 2 and 3, 1994 when the sampling team collected a total of six monitoring well, one residential well, three sediment and seven soil samples which were analyzed for full organic and inorganic Target Compound List substances.

In November 2000, the Illinois EPA's Site Assessment Program prepared and

submitted to the Region V offices of the U. S. Environmental Protection Agency a ESI inspection work plan for the Rockford Sand and Gravel facility. The sampling portion of the ESI inspection was conducted on November 28 and 29, 2000. The Illinois Environmental Protection Agency sampling team collected a total of five onsite subsurface soil samples, six offsite residential groundwater samples and five sediment samples from the Rock River adjacent to the property.

The IEPA performed the CERCLA Expanded Site Inspection activities to fill information gaps that may have existed in previous CERCLA investigations and to determine whether, or to what extent, the site poses a threat to human health and the environment.

U.S.EPA Region V offices have requested that the IEPA identify sites during the Expanded Site Inspection process that may require a Removal Action in order to remove an immediate human health and/or environmental threat. No request has been made at this point for the Rockford Sand and Gravel facility.

1.2 SITE DESCRIPTION

The Rockford Sand and Gravel (Number 1) is an inactive gravel pit located on South Main Street (Route 2) and Simpson Road at the southwest side of Rockford, (population 142,815) Winnebago County, Illinois. The property consists of approximately 57.8 acres and has one active business, Rock River Disposal Company, 4002 South Main, located on the site. The company employees approximately eight people who work on the premises full time repairing trucks. The company does not store wastes on the property.

A review of aerial photographs obtained from the Illinois Department of

Transportation (dated 3/23/72 and 9/26/79) indicate that activities at the Rockford Sand and Gravel No. 1 site covered the area enclosed by South Main Street (Route 2) on the west, to Indian Hills Subdivision on the north, to the Rock River on the east side and Simpson Road on the south. Sanborn Fire Insurance maps reviewed at the Illinois State Library did not indicate that the property was used for manufacturing or other commercial purposes. The property is currently owned by several parties. The Rock River Water Reclamation District of Rockford owns a strip of land along the Rock River of approximately 11.8 acres. Winnebago reclamation Service, Inc. owns the largest portion consisting of approximately 39.4 acres. Rock River Disposal Company owns approximately 6.6 acres, including an active truck repair facility located at the southwest portion of the property along South Main Street (Route 2).

The property is legally described as being located in the Southeast Quarter of the Southwest Quarter, and the Southwest Quarter of the Southeast Quarter, of Section Three, Township Forty-Three North, Range One East of the Third Principal Meridian in Winnebago County, Illinois. The site is surrounded by South Main Street (Route 2) on the west, with businesses and private residences across Main Street; by Indian Hills Subdivision on the north, all residences who use private groundwater wells for drinking; by the Rock river on the east; and on the south by Simpson Road with the closed Rockford Sand and Gravel Number 2 pit lying beyond. The portion of Simpson Road on the south side of the property has been closed off and access is through a private road off of South Main Street across from Southrock Drive. Trespassers in the past have been reported to use the pond located at Rockford Sand and Gravel No. 2 for swimming and fishing. A four-mile radius map of the Rockford Sand and Gravel site and a fifteen-mile

surface water map is provided in Appendix A and B of this report.

1.3 SITE HISTORY

According to a search of Illinois of Illinois Environmental Protection Agency files and interviews with personnel of the current owners, Robert Anderson began sand and gravel mining operations in the late 1940's or early 1950's and ceased mining in the late 1960's. At this time the property was purchased by Rockford Blacktop Company. Rockford Blacktop Company continued mining sand and gravel until the site was permitted in 1973 to receive non-hazardous wastes such as demolition debris and has been permitted to receive phosphate waste water from National Lock Company. The Illinois Environmental Protection Agency has received complaints from local citizens that the property has received unauthorized industrial wastes.

A CERCLA Integrated Assessment inspection was conducted by the Illinois Environmental Protection Agency on November 2 and 3, 1994. Activities included the collection of six onsite soil samples, six onsite monitoring wells and two sediment samples along the Rock River. The soil samples collected onsite were shallow samples collected with stainless steel trowels and bucket augers. The results of the inspection are included in this report in Tables 8, 9, 10 and 11.

1.4 REGULATORY STATUS

The Rockford Sand and Gravel Company began operations approximately 50 years ago and has been used to dispose of various permitted wastes from 1973 until 1992. Illinois Environmental Protection Agency files indicate that a number of permits have

been issued to the landfill location under the names Rockford Blacktop Construction Company and Rockford Sand and Gravel. After the mining of sand and gravel was discontinued in the late 1960's the property was issued a number of permits to dispose of a variety of non-hazardous materials. In April 1973 permit 1973-23 was issued to Rockford Blacktop Construction Company to use the sand and gravel pit as a landfill to accept roofing, cement blocks, broken concrete, dirt and other relatively inert materials in the western pit. The eastern pit was permitted to receive brush, limbs, trees, leaves, lumber, demolition wastes, tires and white goods. In 1974 permit 74-60 was issued allowing the disposal of 4,000 gallons of phosphate wash water from National Lock Company. In 1981 permit 1981-22-DE was issued to C. J. Howard to develop a landfill to accept only broken asphalt and Portland cement, uncontaminated soils and aggregate, with a top soil cover of unspecified thickness required after final contour was reached. In 1989 permit 1989-20-DE/OP was issued for the composting of landscape wastes.

During its years of operation the facility was not subject to the Resource Conservation and Recovery Act (RCRA), Federal Insecticide and Rodenticide Act (FIFRA), Atomic Energy Act (AEA), or Uranium Mill Tailings Radiation Control Act (UMTRCA).

SECTION 2

EXPANDED SITE INSPECTION ACTIVITIES

2.1 RECONNAISSANCE ACTIVITIES

The site reconnaissance visit was conducted by the Office of Site Evaluation of the Illinois Environmental Protection Agency on November 8, 2000 to determine potential sampling locations at the site. Prior to the recon representatives of Winnebago Reclamation Service, Inc. were contacted by phone. During the recon the author met with a representative of the company and a walk through of the property was conducted. The western three-quarters of the property is relatively flat but irregular due to cover not being graded perfectly level, with the filled-in gravel pit area being vegetated with weeds and small trees. The eastern portion along the Rock River consists of a strip of land approximately 400 feet wide that belongs to Rock River Water Reclamation District of Rockford that contains mounds of dirt and is covered with brush and trees of various sizes. Indian Hills Subdivision borders the property on the north side and all its residents use private wells for drinking. Simpson Road used to extend to part of the south side of the site but has been closed off. Rockford Sand and Gravel Number 2 lies adjacent to the south side of the property and is slowly being filled in with demolition debris. On the west side of the property is a truck repair building which belongs to Rock River Disposal Company and employees approximately eight people full time. South Main Street (Route 2) runs along the west side of the property.

2.2 SAMPLING ACTIVITIES

Sampling activities were conducted onsite November 28 and 29, 2000 when IEPA personnel collected five onsite subsurface and one background soil samples, and five

sediment samples from the adjacent Rock River and one background sample, and six offsite private well samples. All soil samples, with the exception of the background soil sample, were collected using the Geoprobe. Sediment samples were collected using a bucket auger and private well samples were collected from a tap. All samples were analyzed for the Target Compound List (TCL) in Appendix C. Soil and sediment organic samples were analyzed by ACCURA Analytical Laboratory and inorganics by Sentinel, Inc. Residential groundwater organic samples were analyzed by Mitchem Corporation and inorganic samples by the USEPA Central Regional Laboratory. All laboratories were under contract with USEPA Region 5. All laboratory results were subsequently validated by USEPA Region 5.

Sample locations are shown in figures 4 and 5 and described in Tables 1 and 2. Key sample analytical results from the sampling event are shown in Tables 3, 4, 5, 6 and 7. The analytical results for the soil samples were compared to the Illinois Environmental Protection Agency's Tiered Approach to Corrective Action Objectives (TACO) and to Removal Action Levels (RAL's). Water samples were compared to TACO Tier 1 Class 1 groundwater objectives and Maximum Contaminant Levels (MCL's). Sediment samples were compared to Ontario Sediment ands USEPA Ecotox Thresholds benchmarks. Key samples are samples in which contaminants were detected at concentrations at least three times background levels or had concentrations of potential health concerns. Samples collected during the 1994 CERCLA Integrated Assessment are shown in Tables 8, 9, 10 and 11.

2.3 KEY SAMPLES

Key samples are samples in which contaminants were detected at concentrations at least three times background levels or had concentrations of potential health or environmental concerns. Analytes were found in onsite soil and sediment samples at levels that exceeded these health-based benchmarks. These included volatile, semivolatile, pesticide, tentatively identified compounds and inorganic substances.

SECTION 3

SITE SOURCES

3.1 CONTAMINATED LANDFILL

During the 2000 CERCLA Expanded Site Inspection a total of five onsite subsurface soil, five sediment samples and six residential well samples were collected. Onsite subsurface soil samples were collected using the Geoprobe. Analytical results from these samples document the presence of a number of analytes at concentrations which meet the CERCLA criteria for observed contamination. The analytical results from the soil samples collected onsite showed that a number of volatile, semivolatile, pesticide, tentatively identified compounds and inorganic substances that are at levels greater than three times background, exceeded Removal Action Levels or exceeded TACO Cleanup Objectives. Sediment samples collected from the Rock River adjacent to the site had elevated levels of volatile, semivolatile, tentatively identified compounds and inorganic substances sediment benchmarks. Residential well samples were collected north and west of the site. One sample collected north had elevated levels of lead and iron and the Illinois Department of Public Health sent a letter to the owner recommending that he sample the water for lead to determine if the problem is associated with the plumbing.

Information obtained throughout this CERCLA investigation has identified contaminated soil within the landfill as the primary source type at the Rockford Sand and Gravel site. The soil contamination was found at various locations throughout the site and the area is estimated to be approximately 26.0 acres. This is the area within sampling points X103, X104, X105, X106 and X107.

SECTION 4

MIGRATION PATHWAYS

4.1 GROUNDWATER PATHWAY

Groundwater is widely used in the area. The city of Rockford (population 142,815) obtains all of its drinking water from 37 active wells which pump from various locations throughout the city. The nearest residences known to use private groundwater wells for drinking are located in the subdivision located adjacent to the property on the north side and the nearest municipal well is Rockford well number 34 which is a 1,485 feet deep well cased to 325 feet located approximately 500 feet west of the site. The number of people who use groundwater in a 4-mile radius offsite was estimated using information obtained from the city of Rockford Water Department, USGS topographic maps and the average persons per household in Winnebago county. The estimated population is:

Estimated Groundwater Target Population

Onsite	0
0 to 1/4 mile	4,050
>¼ to 1/2 mile	160
>1/2 to 1 mile	4,000
>1 to 2 miles	11,800
>2 to 3 miles	15,500
>4 to 4 miles	31,300

The geology of the area consists of glacial drift composed of sand and gravels of medium to dense relative density which may be up to 280 feet thick overlying bedrock.

The bedrock is composed of fractured dolomite of the Galena and Plattville Groups of the Ordovician System Champlainian Series which overly the St. Peter Sandstone. Groundwater is obtained locally from both the glacial and bedrock aquifers. The local groundwater flow is unknown but the shallow groundwater flow would be assumed to be toward the Rock River which lies on the east side.

Analytical results from residential groundwater samples collected during the inspection indicate that one sample had elevated concentrations of lead and iron. One residential well was sampled in 1994 and contained bis(2-Ethylhexyl)pthalate.

4.2 SURFACE WATER PATHWAY

No surface water samples were collected during the November 28 and 29, 2000 CERCLA inspection. Due to the irregular nature of the site terrain drainage during a storm event would tend to collect onsite. However, the close proximity of the Rock River suggests that groundwater from the property could enter the river via discharge from the sand and gravel aquifer. According to the Flood Insurance Rate Map for Winnebago County, Illinois, November 19, 1980, the facility lies inside the 100-year floodplain. This Map was compiled prior to the gravel pit being filled to the elevation of the surrounding land so the property now is possibly outside the 100-year floodplain.

The Rock River is widely used for recreation and according to the Illinois Department of Natural resources is classified as a "highly valued aquatic resource' since it provides a good fishery for important game fish species. The average flow of the Rock River in the Rockford area is approximately 4100 cubic feet per second. The nearest wetlands consists of several islands located approximately 400 feet southeast of the property that are classified as Paulustrine Forested Broad-leaved deciduous seasonally

flooded wetlands with approximately .65 miles of frontage along the river. Rockford Sand and Gravel Pit Number 2 is classified as a Lucustrine Limnetic Unconsolidated bottoms permanently flooded excavated wetland. There are approximately 13.6 miles of wetland frontage along the fifteen mile surface water pathway in the Rock river downstream from the Rockford Sand and gravel property.

Sediment samples collected during the inspection contained elevated levels of volatile, semivolatile, tentatively identified compounds and inorganic substances.

4.3 AIR PATHWAY

Air monitoring with a TVA (Toxic Vapor Analyzer) was conducted during the Expanded Site Inspection but did not indicate a release to the breathing zone. Most of the property is vegetated but there is a potential for windborne contamination since contamination was found in the top six inches of soil during the 1994 CERCLA inspection. The property is fenced on the north and west sides and has restricted access and is in a relatively remote area. A group of small businesses and private residences located approximately 800 feet south of the facility represents the location of the nearest non-worker. The nearest school is located approximately three quarter of a mile west and there are approximately 45,924 people who live within a 4-mile radius of the site. The estimated population potential for release is:

Estimated Air Target Population

Onsite	8
0 to ¼ mile	251
¼ to ½ mile	1,865

½ to 1 mile	3,650
1 to 2 miles	7,350
2 to 3 miles	10,800
3 to 4 miles	22,000

4.4 SOIL EXPOSURE PATHWAY

Soil samples collected during the 1994 Integrated Assessment inspection document areas of observed contamination by contaminants that are attributable to the site. People were reported to have trespassed and fish in the sand and gravel pit (Rockford Sand and Gravel No. 2) located adjacent to the south side of the property. The property is not completely fenced but has restricted access and is in a relatively remote area. Private residences located adjacent to the north side of the property represents the location of the nearest non-worker. The nearest school, Riverside School, is located approximately three-quarters of a mile south of the site. A review of USGS topographic maps, city maps and U.S. Census data indicate that there are approximately 5,774 people that live within a one-mile radius of the site. The estimated population within one mile of the site is:

Onsite	8
0 to ¼ mile	251
¼ to ½ mile	1,865
½ to 1 mile	3,650

A review by the Illinois Department of Natural Resources did not indicate any terrestrial sensitive environments near the Rockford Sand and Gravel site. Wetland

inventory maps indicate that there are approximately 56.7 acres of wetlands located within a half mile of the site.

Soil samples collected during the Expanded Site Inspection document areas of observed contaminants that are attributable to the site.

SECTION 5

ADDITIONAL RISK BASED OBJECTIVES

This section discusses additional screening objectives used to evaluate the Rockford Sand and Gravel site. These objectives have not been used to assess the site for Hazard Ranking System (HRS) purposes.

5.1 TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO)

The Illinois EPA's TACO Guidance Document (proposed rules under 35 IL Adm. Code Part 742), can be used to develop site-specific remediation objectives. This document discusses key elements required to develop risk-based remediation objectives, how background values may be used, and provides guidance through three tiers of the risk-based approach. The Illinois EPA uses this guidance, and the groundwater standards established in 36 IL Adm. Code 620, to determine soil and groundwater remediation objectives.

The soil contaminants from the Rockford Sand and Gravel site were compared to the soil remediation objectives established for industrial/commercial properties, with the inhalation, ingestion and migration to groundwater routes each evaluated. Tier 1 consists of "look-up" tables, which considers limited site-specific information and are based on simple numeric models. Several soil samples exceeded these benchmarks for organic and inorganic substances.

SECTION 6

6.1 BIBLIOGRAPHY

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USGS, 1993, Rockford North, IL. Quadrangle, 7.5 minute series.

USGS, 1971, Kishwaukee, IL. Quadrangle, 7.5 minute series.

USGS, 1993, Rockford South, IL. Quadrangle, 7.5 minute series.

IEPA Site Reconnaisance visit of November 8, 2000 to Rockford Sand and Gravel, Rockford, IL.

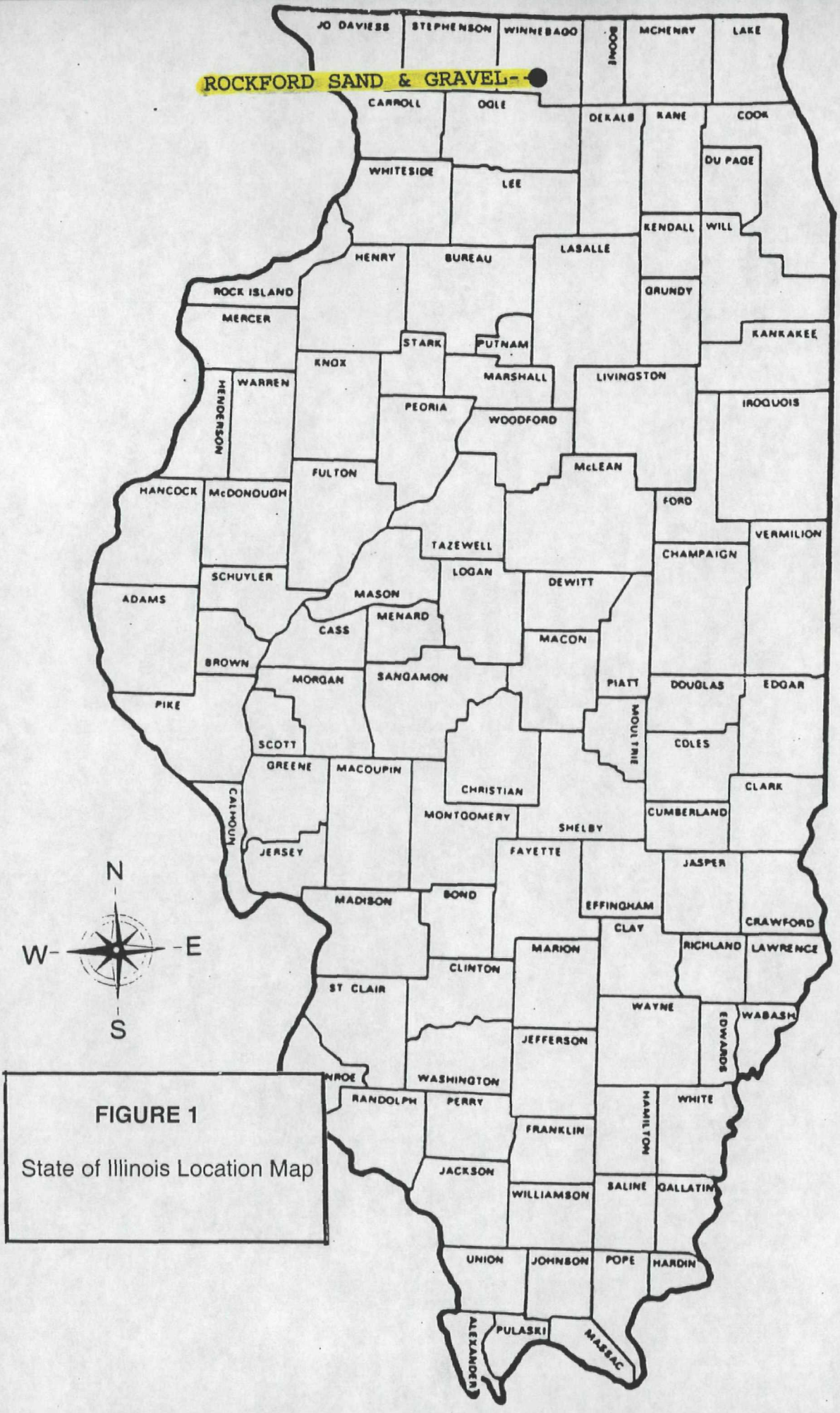


FIGURE 1

State of Illinois Location Map

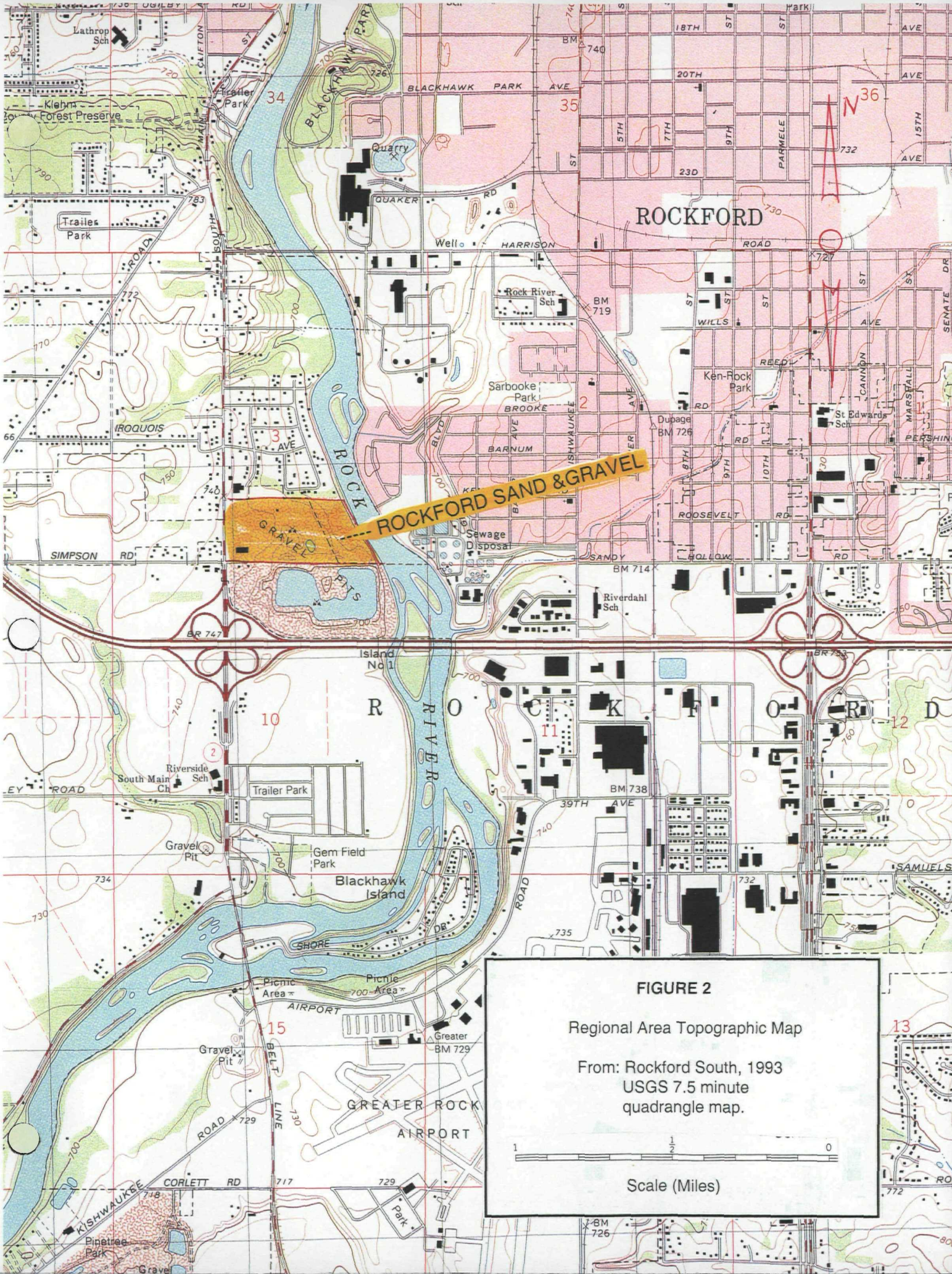


FIGURE 2

Regional Area Topographic Map

From: Rockford South, 1993
USGS 7.5 minute
quadrangle map.

1 ½ 0

Scale (Miles)

Photo Location Map

Scale: one inch equals approximately 200 feet.

From: Illinois Department of Transportation photo taken on April 14, 1998.

Soil Sample Location

Sediment Sample Location

Approximate Site Boundry

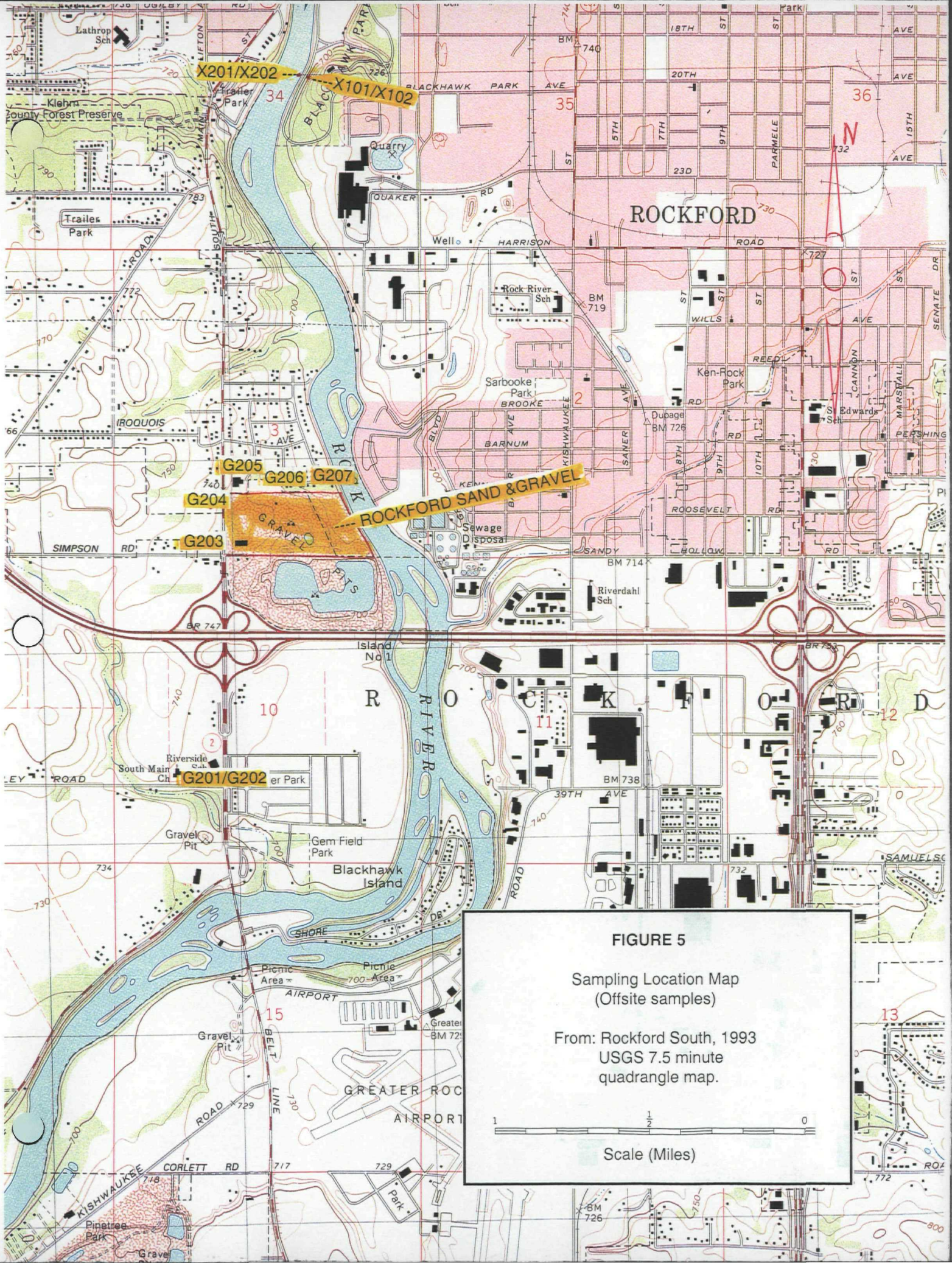
Rockford Sand & Gravel

Sample Location Map

Figure 4

N

400 0 400 800 Feet


X201/X202
X101/X102
G205
G206
G207
G204
G203
ROCKFORD SAND &GRAVEL
G201/G202
ROCKFORD
ROCK RIVER
Blackhawk Island
Island No 1
Lathrop Sch
Klehm County Forest Preserve
Trailer Park
Quarry
Well
Rock River Sch
Sarbooke Park
Ken-Rock Park
St Edwards Sch
Dupage BM 726
Sewage Disposal
Riverdahl Sch
BM 714
BM 719
BM 738
BM 740
Riverside Sch
South Main Ch
Gravel Pit
Gem Field Park
Picnic Area
Pinetree Park
GREATER ROC
AIRPORT
HARRISON
ROAD
BLACKHAWK PARK AVE
QUAKER RD
SIMPSON RD
IROQUOIS
BARNUM
BROOKE
REED
WILLS
ROOSEVELT
SANDY HOLLOW RD
39TH AVE
SHORE
AIRPORT
CORLETT RD
KISHWAUKEE
BELT LINE ROAD
BR 747
BR 751
18TH AVE
20TH AVE
23D
PARMELE
SENATE DR
PERSHING
MARSHALL
CANNON
SAMUELSO
FIGURE 5
Sampling Location Map
(Offsite samples)
From: Rockford South, 1993
USGS 7.5 minute
quadrangle map.
1
1/2
0
Scale (Miles)

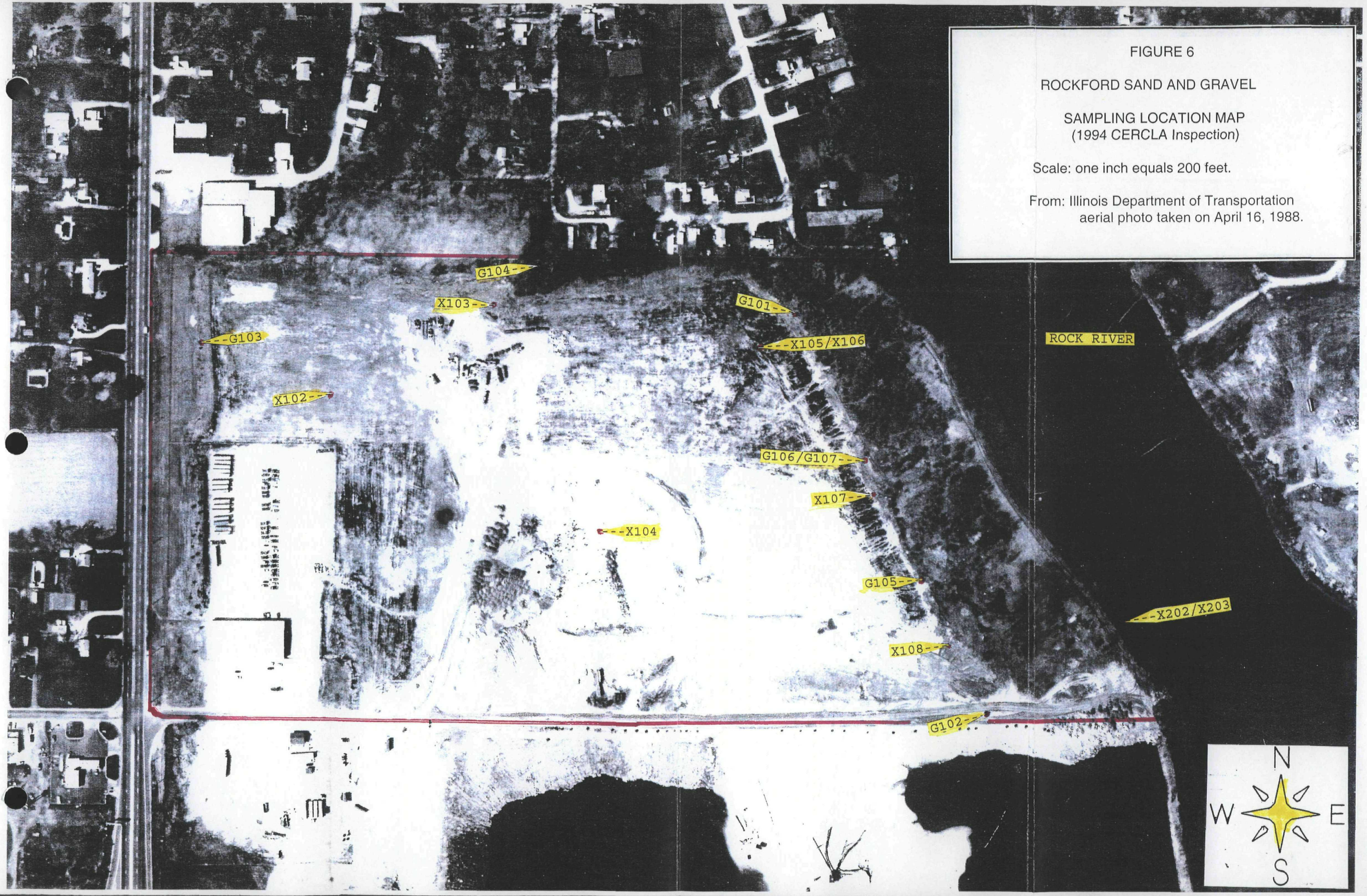


FIGURE 6

ROCKFORD SAND AND GRAVEL

SAMPLING LOCATION MAP
(1994 CERCLA Inspection)

Scale: one inch equals 200 feet.

From: Illinois Department of Transportation
aerial photo taken on April 16, 1988.

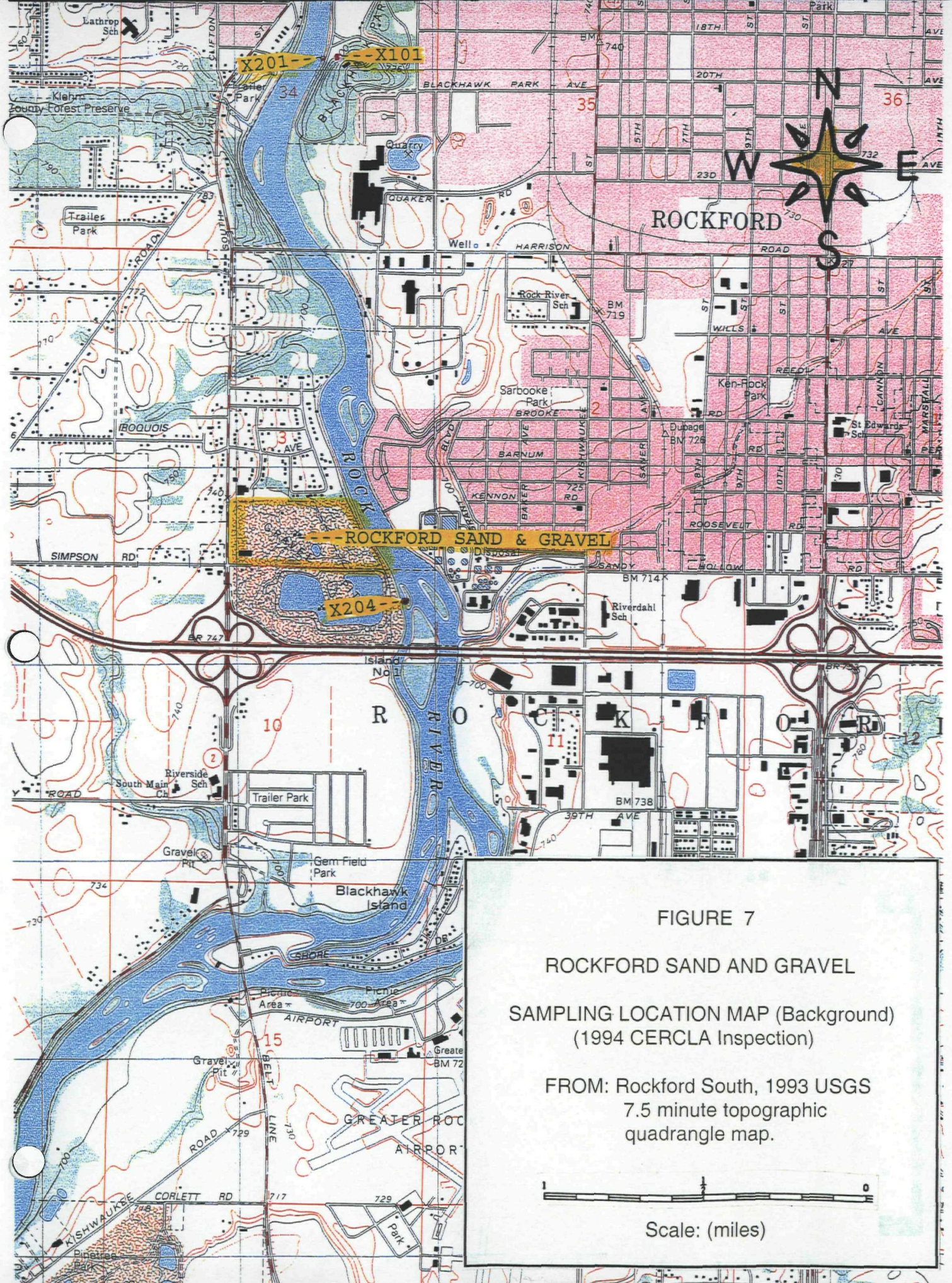


FIGURE 7

ROCKFORD SAND AND GRAVEL

SAMPLING LOCATION MAP (Background)
(1994 CERCLA Inspection)

FROM: Rockford South, 1993 USGS
7.5 minute topographic
quadrangle map.

1 0

Scale: (miles)

TABLE 1
Soil Sample Description

Sample Date Time	Depth	Location	Appearance
X101 X102 11/29/2000 15:50	2" to 6"	Background and duplicate soil sample collected at Blackhawk Park, located approximately 1.4 miles north of the Rockford Sand & Gravel site.	Black silty loam.
X103 11/28/2000 15:30	VOA - 16' - 20' BNA/Pest/PCB - 9 - 10' Inorg - 16 - 20'	Collected at the north-central area of the property.	0 to 1' - cover material. 1' to 16' - fill wood, plastic & paper. 16' to 20' - silty material mixed with wood fragments
X104 11/28/2000 13:00	VOA - 6' BNA/Pest/PCB - 6' - 8' Inorg - 2' 4'	Collected at the northeast area of the property.	0 to 2' - silty clay, cover. 2' to 4' - cinders, plastic, gravel, green inorganic material. 4' to 8' - wood, black material, silty clay & gravel. (sleeve had only 1.5 feet of recovery). 8 to 12' - silty clay, gravel (3' recovery). 12' to 16' - water, silts and sand to 15' (2' recovery). 16' to 20' - fill material (1.5' of recovery0. 20' to 24' - sands, gravels, plastic and wood (8" recovery).
X105 11/28/2000 11:40	VOA - 20' BNA/Pest/PCB - 19'-20' Inorg - 18'-19'	Collected at the southeast area of the property.	0 to 9' - sand, gravel, refuse (paper & wood). 9' to 14' - silty material. 14' to 18' - black silt with gravel, limestone chunks. 18' to 28' - silts, brick, gravel.
X106 11/28/2000 16:30	VOA - 10' BNA/Pest/PCB - 10' -12' Inorg - 8' - 10'	Collected at the northwest area of the property.	0 to 1.5' - cover material. 1.5' to 12' - fill material.
X107 11/29/2000 09:45	VOA - 6' - 8' BNA/Pest/PCB - 6' - 8' Inorg - 6' - 8'	Collected at the southwest area of the property.	0 to 16' - dark brown silty soil.

TABLE 2
Sediment Sample Description

Sample Date Time	Depth	Location	Appearance
X201 X202 11/29/2000 15:40	1" to 8"	Background and duplicate soil sample collected at Blackhawk Park, located approximately 1.4 miles north of the Rockford Sand & Gravel site.	Gray sandy gravel.
X203 11/29/2000 13:15	1" to 8"	Collected at the northeast corner of the property in the Rock River, which borders the east side of the site.	Sand. gravel, some silt.
X204 11/29/2000 13:35	1" to 8"	Collected at the east side of the property in the Rock River.	Black silt, organic matter.
X205 11/29/2000 14:00	1" to 8"	Collected at the east side of the property in the Rock River.	Black silt, some organic material.
X206 11/29/2000 02:30 PM	1" to 8"	Collected at the east side of the property in the Rock River.	Black silt and gravel, much organic matter.
X207 11/29/2000 15:00	1" to 8"	Collected at the east side of the property in the Rock River.	Tan medium gray sand and gravel with silt.

TABLE 3
Groundwater Sample Description

Sample Date Time	Depth	Location	Appearance
G201 G202 11/28/2000 11:00	87 feet	Background and duplicate sample collected at a trailer park located approximately 1.4 miles south of the Rockford Sand & Gravel site.	Clear.
G203 11/29/2000 10:00	Unknown	Collected from a private residence located west of the site.	Clear.
G204 11/29/2000 09:00	Unknown	Collected from a private residence located west of the site.	Clear.
G205 11/29/2000 14:00	Unknown	Collected from a private residence located north of the site.	Clear.
G206 11/29/2000 11:30	Unknown	Collected from a private residence located north of the site.	Clear.
G207 11/29/2000 11:00	Unknown	Collected from a private residence located north of the site.	Clear.

SITE NAME ROCKFORD SAND & GRAVEL
ILO NUMBER 000034371

TABLE 4
KEY SAMPLES
(Soil)

SAMPLING POINT	X101 11/29/00 (Background)	X102 11/29/00	X103 11/28/00	X104 11/28/00	X105 11/28/00	X106 11/28/00	X107 11/29/00	TACO CLEANUP OBJECTIVES	RALs
PARAMETER									
VOLATILES									
Methylene Chloride	5.0 J	3.0 J	70.0 D	140.0 D	370.0 D	--	--	760.0	--
Carbon Disulfide	--	--	22.0	21.0	17.0 DJ	--	5.0 J	200,000	--
2-Butanone (MEK)	10.0 J	10.0 J	69.0	38.0 DJ	61.0 D	--	--	--	--
Cyclohexane	--	--	29.0	24.0	--	--	3.0 J	--	--
Methylcyclohexane	--	--	19.0	41.0	--	--	6.0 J	--	--
Benzene	--	--	16.0	14.0	8.0 DJ	--	--	200.0	5,900,000
2-Hexanone	--	--	14.0	4.0 J	--	--	--	--	--
Toluene	--	--	18.0	37.0	10.0 DJ	--	5.0 J	410,000	16,000,000
Chlorobenzene	--	--	6.0 J	160.0 D	--	--	--	41,000	16,000,000
Ethylbenzene	--	--	160.0	260.0 D	--	--	--	200,000	78,000,000
Xylene(total)	--	--	140.0	550.0 D	--	--	5.0 J	1,000,000	--
1,4-Dichlorobenzene	--	--	--	29.0 DJ	--	--	--	--	--
Isopropylbenzene	--	--	23.0	16.0	--	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	mg/Kg	ug/Kg
SEMIVOLATILES									
4-Methylphenol	--	--	2200.0 J	--	370.0 J	470.0	--	--	--
2,4-Dimethylphenol	--	--	1100.0 J	--	--	77.0 J	--	41,000	16,000,000
Naphthalene	81.0 J	--	58000.0	600.0 J	3900.0	460.0	--	82,000	500,000
2-Methylnaphthalene	--	--	28000.0	2900.0	3000.0	280.0 J	--	--	--
1,1'-Biphenyl	--	--	9300.0	220.0 J	800.0 J	110.0 J	--	--	--
Acenaphthylene	--	--	1200.0 J	--	330.0 J	--	--	--	--
Acenaphthene	--	--	37000.0	720.0 J	5000.0	830.0	--	120,000	1,000,000
Dibenzofuran	--	--	38000.0	600.0 J	3700.0	540.0	--	--	--
Fluorene	--	--	66000.0 D	1200.0 J	7000.0	960.0	38.0 J	82,000	1,000,000
Pentachlorophenol	--	--	--	1800.0 J	--	--	--	24.0	100,000
Phenanthrene	53.0 J	51.0 J	270000.0 D	3000.0	52000.0 D	5600.0 D	310.0 J	--	1,000,000
Anthracene	--	--	81000.0 D	570.0 J	14000.0 D	1200.0	65.0 J	610,000	1,000,000
Carbazole	--	--	46000.0	280.0 J	7200.0	770.0	40.0 J	290.0	--
Di-n-Butylphthalate	--	--	--	--	370.0 J	190.0 J	--	200,000	78,000,000
Fluoranthene	95.0 J	84.0 J	240000.0 D	950.0 J	66000.0 D	6200.0 D	360.0 J	--	1,000,000
Pyrene	76.0 J	74.0 J	230000.0 D	1300.0 J	60000.0 D	5000.0 D	320.0 J	61,000	1,000,000
Butylbenzylphthalate	--	--	--	--	--	280.0 J	--	410,000	160,000,000
Benzo(a)anthracene	--	--	110000.0 D	440.0 J	39000.0 D	2200.0	150.0 J	8.0	1,000,000
Chrysene	55.0 J	48.0 J	110000.0 D	620.0 J	44000.0 D	2400.0	160.0 J	780.0	1,000,000
bis(2-Ethylhexyl)phthalate	41.0 J	--	--	280.0 J	--	1700.0	--	410.0	12,000,000
Benzo(b)fluoranthene	47.0 J	--	88000.0 D	--	34000.0 D	2000.0	130.0 J	8.0	--
Benzo(k)fluoranthene	--	--	81000.0 D	--	30000.0 D	1600.0	100.0 J	78.0	1,000,000
Benzo(a)pyrene	41.0 J	--	98000.0 D	--	36000.0 D	2200.0	130.0 J	0.8	1,000,000
Indeno(1,2,3-cd)pyrene	--	--	54000.0 D	--	21000.0 D	1400.0	68.0 J	8.0	1,000,000
Dibenz(a,h)anthracene	--	--	23000.0	--	10000.0	690.0	--	0.8	1,000,000
Benzo(g,h,i)perylene	--	--	50000.0 D	--	18000.0 D	2200.0	65.0 J	--	1,000,000
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	mg/Kg	ug/Kg
PESTICIDES									
Dieldrin	--	--	66.0 DP	3.6 P	--	4.8 P	--	0.4	11,000
4,4'-DDE	--	--	--	14.0 P	9.3 P	5.4 P	--	17.0	500,000
4,4'-DDD	--	--	18.0 P	6.6	4.6 P	29.0	--	24.0	710,000
Endosulfan sulfate	--	--	50.0 P	--	--	--	--	--	--
4,4'-DDT	--	--	67.0 D	5.5 P	6.5 P	8.0	--	17.0	390,000
Endrin Ketone	--	--	100.0 DP	17.0 P	19.0	7.8 P	--	--	--
Endrin aldehyde	--	--	210.0 DP	19.0 P	4.3 P	6.8 P	--	--	--
alpha-Chlorodane	--	--	--	--	--	7.5	4.3	4.0	--
gamma-Chlorodane	--	--	84.0 DP	--	--	5.2 P	4.5	4.0	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	mg/Kg	ug/Kg
INORGANICS									
ANTIMONY	--	--	--	--	--	5.8 B	--	820.0	--
ARSENIC	3.2 J	3.0	6.1	4.1	10.1	--	--	3.0	200.0
BARIUM	78.1	80.0	--	260	709	333	--	140,000	--
BERYLLIUM	--	--	--	0.83	--	--	--	1.0	40.0
CADMIUM	0.24 B	0.24 B	2.0	1.7	146	1.2	0.98 B	2,000	25.0
CHROMIUM	6.1	6.8	--	30.5	1040	52.4	--	10,000	400.0
COPPER	5.9 B	6.0 B	46.1	36.8 J	1350	189	--	82,000	5000.0
LEAD	19.8	20.4	188	76.9	1510	205	--	400.0	1000.0
MAGNESIUM	1150 B	1210 B	54100	35600	10800	27400	26600	--	--
MERCURY	--	--	--	0.14	1.2	0.13	0.060 B	610.0	1600.0
NICKEL	4.9 B	5.7 B	--	16.1	110	48.0	--	41,000	1600.0
SILVER	--	--	--	--	10.5	--	--	10,000	2300.0
ZINC	37.3	38.7	750	189	3020	1180	--	610,000	160,000
CYANIDE	--	--	0.18 B	0.80	6.5	0.17 B	--	41,000	350.0
pH	7.0	7.0	7.0	7.0	7.0	7.0	7.0	--	--
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Cleanup Objectives are based on the Illinois Environmental Protection Agency's Tiered Approach to Corrective Action Objectives. The objectives presented in this table are based on Tier 1 Ingestion/Inhalation for the Soil Exposure Route for an Industrial/Commercial scenario.

SITE NAME ROCKFORD SAND & GRAVEL
ILO NUMBER 000034371

TABLE 5
KEY SAMPLE SUMMARY
TENTATIVELY IDENTIFIED COMPOUNDS
(Soil)

SAMPLING POINT	X101 11/29/00 (Background)	X102 11/29/00	X103 11/28/00	X104 11/28/00	X105 11/28/00	X106 11/28/00	X107 11/29/00	TACO CLEANUP OBJECTIVES	RAL,s
PARAMETER									
VOLATILES									
Cis-3,5-Dimethylcyclohexanon	--	--	--	120.0 NJ	--	--	--	--	--
Nonane	--	--	--	390.0 NJ	--	--	--	--	--
Cyclohexane, 1-ethyl-2-methy	--	--	--	420.0 NJ	--	--	--	--	--
Bicyclo [3.2.1] octane	--	--	--	190.0 NJ	--	--	--	--	--
Octane, 3,6-dimethyl-	--	--	--	280.0 NJ	--	--	--	--	--
Cyclohexane, propyl-	--	--	--	370.0 NJ	--	--	--	--	--
Nonane, 4-methyl-	--	--	--	310.0 NJ	--	--	--	--	--
Undecane, 5,6-dimethyl-	--	--	--	250.0 NJ	--	--	--	--	--
Decane, 2,5,6-trimethyl-	--	--	--	640.0 NJ	--	--	--	--	--
1-Decene, 3,4-dimethyl-	--	--	--	670.0 NJ	--	--	--	--	--
Benzene, 1-ethyl-2-methyl-	--	--	--	250.0 NJ	--	--	--	--	--
Cyclohexane, 1-methyl-2-prop	--	--	--	340.0 NJ	--	--	--	--	--
Decane	--	--	80.0 NJ	320.0 NJ	--	--	--	--	--
Benzene, 1,2,3-trimethyl-	--	--	--	1100.0 NJ	--	--	--	--	--
Decane, 3-methyl-	--	--	--	220.0 NJ	--	--	--	--	--
Docane, 3-methyl-	--	--	--	350.0 NJ	--	--	--	--	--
Dodecane, 3-methyl-	--	--	--	--	--	--	--	--	--
Cyclohexane, butyl-	--	--	--	270.0 NJ	--	--	--	--	--
1,2,4-trimethylbenzene	--	--	178.0 NJ	510.0 NJ	--	--	--	--	--
Decane, 4-methyl-	--	--	--	300.0 NJ	--	--	--	--	--
Decane, 2-methyl-	--	--	20.0 NJ	430.0 NJ	--	--	--	--	--
Decane, 3-methyl-	--	--	18.0 NJ	310.0 NJ	--	--	--	--	--
Naphthalene, decahydro-	--	--	--	220.0 NJ	--	--	--	--	--
Benzene, 1-methyl-2-(1-methy	--	--	--	140.0 NJ	--	--	--	--	--
Benzene, 1-methyl-3-(1-methy	--	--	--	400.0 NJ	--	--	--	--	--
Benzene, 1-methyl-4-(1-methy	--	--	32.0 NJ	--	--	--	--	--	--
2,3-dihydro-1-methylindene	--	--	--	230.0 NJ	--	--	--	--	--
Bicyclo [2.2.1] heptan-2-one,	--	--	100.0 NJ	250.0 NJ	--	--	--	--	--
Benzene, 1,2,3,5-tetramethyl	--	--	--	260.0 NJ	--	--	--	--	--
Benzene, 2-ethenyl-1,4-dimet	--	--	--	300.0 NJ	--	--	--	--	--
1-H-indene, 2,3-dihydo-1,2-d	--	--	--	170.0 NJ	--	--	--	--	--
Benzene, 1-(1-methylethenyl)	--	--	--	130.0 NJ	--	--	--	--	--
Heptane, 3-methyl-	--	--	11.0 NJ	--	--	--	--	--	--
3-pentanone, 2,4-dimethyl-	--	--	38.0 NJ	--	--	--	--	--	--
1-hexene, 3-methyl-	--	--	24.0 NJ	--	--	--	--	--	--
Cyclohexane, ethyl-	--	--	27.0 NJ	--	--	--	--	--	--
Cyclohexane, 1,1,3-trimethyl	--	--	23.0 NJ	--	--	--	--	--	--
Octane, 4-methyl-	--	--	23.0 NJ	--	--	--	--	--	--
Benzene, 1,2-dimethyl-	--	--	63.0 NJ	--	--	--	--	--	--
3-octyne, 5-methyl-	--	--	25.0 NJ	--	--	--	--	--	--
Nonane, 3-methyl-	--	--	30.0 NJ	--	--	--	--	--	--
Cyclohexane, propyl-	--	--	41.0 NJ	--	--	--	--	--	--
Menth-1(8)-ene	--	--	49.0 NJ	--	--	--	--	--	--
Methylamine, N-(1-methylhexy	--	--	60.0 NJ	--	--	--	--	--	--
Benzene, propyl-	--	--	32.0 NJ	--	--	--	--	--	--
Benzene, 1,2,3-trimethyl-	--	--	98.0 NJ	--	--	--	--	--	--
Benzene, 1-ethyl-2-methyl-	--	--	131.0 NJ	--	--	--	--	--	--
Undecane	--	--	57.0 NJ	--	--	--	--	--	--
Benzene, 1-methyl-2-propyl-	--	--	47.0 NJ	--	--	--	--	--	--
Nonane, 3-methyl-5-propyl-	--	--	22.0 NJ	--	--	--	--	--	--
Benzene, 2-ethyl-1,4-dimethy	--	--	35.0 NJ	--	--	--	--	--	--
Benzene, 1-methyl-4-(1-methy	--	--	32.0 NJ	--	--	--	--	--	--
Hexane	--	--	--	--	--	--	13.0 NJ	--	--
Heptanal	--	--	--	--	--	--	5.0 NJ	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	mg/Kg	ug/Kg

Cleanup Objectives are based on the Illinois Environmental Protection Agency's Tiered Approach to Corrective Action Objectives. The objectives presented in this table are based on Tier 1 Ingestion/Inhalation for the Soil Exposure Route for an Industrial/Commercial scenario.

SITE NAME ROCKFORD SAND & GRAVEL
ILO NUMBER 000034371

Table 5
KEY SAMPLE SUMMARY
TENTATIVELY IDENTIFIED COMPOUNDS
(Soil)

SAMPLING POINT	X101 11/29/00 (Background)	X102 11/29/00	X103 11/28/00	X104 11/28/00	X105 11/28/00	X106 11/28/00	X107 11/29/00	TACO CLEANUP OBJECTIVES	RAL,s
PARAMETER									
SEMIVOLATILES									
1,1'-biphynyl, 2-methyl-	--	--	--	--	1300.0 NJ	--	--	--	--
1,1'-biphynyl, 3-methyl-	--	--	3300.0 NJ	--	--	--	--	--	--
1,1'-biphynyl, 4-methyl-	--	--	--	--	1400.0 NJ	--	--	--	--
1-Benzopyrylium, 2-(4-chloro	--	--	--	--	830.0 NJ	--	--	--	--
1-Naphthalenecarbonitrile	--	--	2700.0 NJ	--	--	--	--	--	--
11H-benzo[a]fluorene	--	--	--	--	2200.0 NJ	--	--	--	--
11H-benzo[b]fluorene	--	--	13400.0 NJ	--	1200.0 NJ	--	--	--	--
1H-cycloprop[e]azulene, deca	--	--	--	--	--	490.0 NJ	--	--	--
2H-1-benzopyran-2-one	--	--	--	--	--	--	110.0 NJ	--	--
3,4-Dihydrocyclopenta(cd)pyr	--	--	2900.0 NJ	--	860.0 NJ	--	--	--	--
3-methyl-4- (methyoxycarbonyl)	--	--	--	1800.0 NJ	--	--	--	--	--
4,5-Dihydro-4,5-epoxybenzpyr	--	--	18000.0 NJ	--	--	--	--	--	--
4-Hexen-3-one, 5-methy-	--	--	--	--	--	560.0 NJ	--	--	--
4H-cyclopenta[def] phenanthre	--	--	4800.0 NJ	--	--	--	--	--	--
5-Hydroxy-4-methoxy-6h-indol	--	--	5500.0 NJ	--	--	--	--	--	--
7H-benz[de]anthracen-7-one	--	--	--	--	1660.0 NJ	--	--	--	--
9H-fluorene, 2,3-dimethyl-	--	--	--	2000.0 NJ	--	--	--	--	--
9H-fluorene, 2-methyl-	--	--	--	1800.0 NJ	--	--	--	--	--
9H-fluorene, 9-(phenylmethyl	--	--	21000.0 NJ	--	--	--	--	--	--
Anthracene, 1,8-diethynyl-	--	--	3400.0 NJ	--	--	--	--	--	--
Anthracene, 1-methyl-	--	--	2800.0 NJ	--	790.0 NJ	540.0 NJ	--	--	--
Anthracene, 2-methyl-	--	--	--	--	980.0 NJ	--	--	--	--
Anthracene, 9-methyl-	--	--	--	1700.0 NJ	--	--	--	--	--
Azulene, 7-ethyl-1,4-dimethy	--	--	--	3100.0 NJ	--	--	--	--	--
Benz[j]aceanthrylene, 3-meth	--	--	--	--	2700.0 NJ	--	--	--	--
Benzene, 1,1'-methylenebis[3	--	--	--	2400.0 NJ	--	--	--	--	--
Benzene, 1-(1-methylethenyl)	--	--	--	1400.0 NJ	--	--	--	--	--
Benzene, 1-methyl-2-(2-pheny	--	--	--	1900.0 NJ	--	--	--	--	--
Benzene, [1,-(2,4-cyclopentad	--	--	2300.0 NJ	--	--	--	--	--	--
Benzo[b]naphtho[2,1-d]thioph	--	--	2900.0 NJ	--	100.0 NJ	--	--	--	--
Benzo[b]triphenylene	--	--	13000.0 NJ	--	--	--	--	--	--
Benzo[c]phenanthrene	--	--	3300.0 NJ	--	--	--	--	--	--
Benzo[e]pyrene	--	--	--	--	--	780.0 NJ	--	--	--
Benzo[e]pyrene	--	--	--	--	--	--	77.0 NJ	--	--
Benzo[ghi] perylene	--	--	6200.0 NJ	--	--	--	--	--	--
Benzo[ghi]fluoranthene	--	--	--	--	940.0 NJ	--	--	--	--
Benzo[k]fluoranthene	--	--	40000.0 NJ	--	11000.0 NJ	--	--	--	--
Bicyclo [2.2.1] heptan-2-one,	--	--	--	--	--	2800.0 NJ	--	--	--
Decane	--	--	--	--	--	910.0 NJ	--	--	--
Dibenz[a,h]anthracene	--	--	9400.0 NJ	--	14800.0 NJ	--	--	--	--
Dibenzofuran, 4-methyl-	--	--	8800.0 NJ	--	1800.0 NJ	--	--	--	--
Dibenzothiophene, 3-methyl-	--	--	--	2400.0 NJ	--	--	--	--	--
Dibenzothiophene, 4-methyl-	--	--	--	1900.0 NJ	--	--	--	--	--
Dodecane, 2,6,11-trimethyl-	--	--	--	--	--	560.0 NJ	--	--	--
Dotriacontane	--	--	--	--	--	--	120.0 NJ	--	--
Eicosane	--	--	--	--	--	530.0 NJ	--	--	--
Fluorene, 2,4a-dihydro-	--	--	7900.0 NJ	--	--	--	--	--	--
Heptacosane	--	--	--	--	--	930.0 NJ	--	--	--
Heptadecane	--	--	--	--	--	1200.0 NJ	--	--	--
Heptadecane, 9-octyl-	--	--	--	--	--	2000.0 NJ	--	--	--
Hexadecane	--	--	--	--	--	610.0 NJ	--	--	--
Hexadecanoic acid	160.0 NJ	450.0 NJ	--	--	--	7300.0 NJ	--	--	--
Muristoyl, pantetheine	--	--	--	--	--	880.0 NJ	--	--	--
Naphthalene, 1,4,6-trimethyl	--	--	--	2300.0 NJ	860.0 NJ	--	--	--	--
Naphthalene, 1,5-dimethyl-	--	--	8600.0 NJ	--	1000.0 NJ	--	--	--	--
Naphthalene, 1,6,7-trimethyl	--	--	--	4900.0 NJ	860.0 NJ	--	--	--	--
Naphthalene, 1,7-dimethyl-	--	--	--	1900.0 NJ	--	--	--	--	--
Naphthalene, 1,8-dimethyl-	--	--	11000.0 NJ	--	--	--	--	--	--
Naphthalene, 1-(2-propenyl)-	--	--	4400.0 NJ	--	--	--	--	--	--
Naphthalene, 1-ethyl-	--	--	--	1300.0 NJ	--	--	--	--	--
Naphthalene, 1-methyl-	--	--	18000.0 NJ	--	--	--	--	--	--
Naphthalene, 1-methyl-7-(1-M)	--	--	--	1500.0 NJ	--	--	--	--	--
Naphthalene, 2,3,6-trimethyl	--	--	--	4400.0 NJ	850.0 NJ	--	--	--	--
Naphthalene, 2,3-dimethyl-	--	--	4600.0 NJ	--	3400.0 NJ	--	--	--	--
Naphthalene, 2,6-dimethyl-	--	--	4800.0 NJ	4600.0 NJ	1700.0 NJ	790.0 NJ	--	--	--
Naphthalene, 2-ethyl-	--	--	2500.0 NJ	--	--	--	--	--	--
Naphthalene, 2-methyl-	--	--	--	2800.0 NJ	2300.0 NJ	--	--	--	--
Naphtho[2,3-b] furan-9(4h)-on	--	--	--	--	--	1200.0 NJ	--	--	--
Nonanoic acid, 7-methyl-, me	--	130.0 NJ	--	--	--	--	--	--	--
octadecanal	--	160.0 NJ	--	--	--	--	--	--	--
Octadecane	--	--	--	2000.0 NJ	--	--	--	--	--
Octane, 3,5-dimethyl-	--	--	--	--	--	900.0 NJ	--	--	--
Pentadecane	--	220.0 NJ	--	3100.0 NJ	--	550.0 NJ	--	--	--
Pentadecane, 2,6,10,14-tetra	--	--	--	--	--	1400.0 NJ	--	--	--
Perylene	--	--	87000.0 NJ	--	44000.0 NJ	--	--	--	--
Phenanthene, 1-methyl-	--	--	--	5600.0 NJ	--	--	--	--	--
Phenanthrene, 2,3,5-trimethy	--	--	--	1500.0 NJ	--	--	--	--	--
Phenol, 3-(2-phenylethyl)-	--	--	--	--	--	6100.0 NJ	--	--	--
Pyrene	--	--	--	--	4200.0 NJ	--	--	--	--
Pyrene, 2-methyl-	--	--	--	--	810.0 NJ	--	--	--	--
Quinoline, 6-methyl-, 1-oxid	--	--	--	--	--	520.0 NJ	--	--	--
S-Indacen-1 (2H)-one,3,5,6,7	--	--	--	6600.0 NJ	--	--	--	--	--
Tetradecane	--	--	--	--	--	--	--	--	--
Tetradecane	--	--	--	3000.0 NJ	--	1000.0 NJ	--	--	--
Tetradecanoic acid	--	--	--	--	--	1300.0 NJ	--	--	--
Thymol	--	--	--	--	--	570.0 NJ	--	--	--
Triphenylene, 2-methyl-	--	--	--	--	770.0 NJ	--	--	--	--
Undecane	--	--	--	--	--	680.0 NJ	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	mg/Kg	ug/Kg

Cleanup Objectives are based on the Illinois Environmental Protection Agency's Tiered Approach to Corrective Action Objectives. The objectives presented in this table are based on Tier 1 Ingestion/Inhalation for the Soil Exposure Route for an Industrial/Commercial scenario.

SITE NAME ROCKFORD SAND & GRAV
ILO NUMBER 000034371

TABLE 6
KEY SAMPLES
(Sediment)

SAMPLING POINT	X201 11/29/00 (Background)	X202 11/29/00	X203 11/29/00	X204 11/29/00	X205 11/29/00	X206 11/29/00	X207 11/29/00	Ontario Sediment Benchmarks	USEPA Ecotox Thresholds
PARAMETER									
VOLATILES									
Acetone	17.0	22.0	--	--	--	100.0	130.0	--	--
Carbon Disulfide	--	--	--	4.0 J	--	15.0 J	16.0 J	--	--
Methyl Acetate	--	--	--	--	--	14.0 J	--	--	--
2-Butanone (MEK)	--	--	--	--	--	9.0 J	20.0 J	--	--
Cyclohexane	--	--	--	--	--	--	24.0 J	--	--
Benzene	--	--	--	--	--	--	42.0 J	--	57.0
Ethylbenzene	--	--	--	--	--	--	16.0 J	--	3,600
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
SEMIVOLATILES									
Naphthalene	--	--	--	--	--	100.0 J	--	--	480.0
Acenaphthylene	--	--	--	--	110.0 J	--	--	--	--
Acenaphthene	--	--	--	--	--	130.0 J	--	--	620.0
Dibenzofuran	--	--	--	--	--	100.0 J	--	--	2,000
Fluorene	--	--	--	--	--	170.0 J	--	--	540.0
Phenanthrene	170.0 J	290.0 J	--	--	--	1200.0	--	--	850.0
Carbazole	--	--	--	--	--	150.0 J	--	--	--
Di-n-Butylphthalate	--	--	--	--	90.0 J	--	--	--	11,000
Benzo(a)pyrene	170.0 J	270.0 J	--	--	740.0	620.0 J	--	--	430.0
Dibenz(a,h)anthracene	--	--	--	--	140.0 J	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
PESTICIDES: None Detected									
INORGANICS									
BARIUM	28.1 B	--	--	--	138	--	--	--	--
CADMIUM	0.21 B	--	--	--	1.3 B	0.65 B	--	.6	--
COBALT	--	2.8 B	--	--	9.0 B	--	--	50.0	--
COPPER	7.2	10.1	--	--	27.9	--	--	16.0	--
IRON	4860	7610	--	--	20100	--	--	20,000	--
LEAD	15.5	74.7	--	--	65.9	--	--	31.0	--
MERCURY	0.090 B	--	--	--	2.3	--	--	0.2	--
NICKEL	4.7 B	7.9 B	--	--	21.0	--	--	16.0	--
SILVER	--	--	--	--	2.1 B	--	--	0.5	--
SODIUM	--	--	265 B	--	341 B	--	--	--	--
ZINC	26.9	57.5	--	--	161	--	--	120.0	--
pH	7.0	7.0	7.0	7.0	7.0	7.0	7.0		
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

SITE NAME ROCKFORD SAND & GRAVEL
ILO NUMBER 000034371

TABLE 7
KEY SAMPLE SUMMARY
TENTATIVELY IDENTIFIED COMPOUNDS
(Sediment)

SAMPLING POINT	X201 11/29/00 (Background)	X202 11/29/00	X203 11/29/00	X204 11/29/00	X205 11/29/00	X206 11/29/00	X207 11/29/00	Ontario Sediment Benchmarks	USEPA Ecotox Thresholds
PARAMETER									
VOLATILES									
Hexane	--	--	--	--	--	--	78.0 NJ	--	--
Carbon dioxide	--	--	770.0 NJ	--	1200.0 NJ	--	2100.0 NJ	--	--
2-pentene, 4-methyl-, (E)	--	--	10.0 NJ	--	--	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
SEMIVOLATILES									
(6H) cyclobuta[jk]phenanthren	--	--	--	110.0 NJ	--	--	--	--	--
(R)-(-)-(z)-14-methyl-8-hexa	--	--	--	--	190.0 NJ	--	--	--	--
.Delta.-selinene	--	--	--	--	--	--	110.0 NJ	--	--
1,4-Butanediamine	--	--	--	110.0 NJ	--	--	--	--	--
1-Docosene	--	--	--	--	--	140.0 NJ	--	--	--
1-Dotriacontanol	--	--	--	--	--	350.0 NJ	--	--	--
1-Eicosanol	--	--	--	--	--	420.0 NJ	--	--	--
1-Hexacosanal	--	--	--	--	--	6800.0 NJ	--	--	--
10-Nonadecanone	--	--	--	--	--	270.0 NJ	--	--	--
10-methylnonadecane	--	--	--	98.0 NJ	--	--	--	--	--
11H-benzo[a]fluorene	--	--	--	--	120.0 NJ	--	--	--	--
11H-benzo[b]fluorene	--	100.0 NJ	--	110.0 NJ	319.0 NJ	280.0 NJ	--	--	--
1H-Cycloprop[e]azulene, deca	--	--	--	--	--	190.0 NJ	--	--	--
1H-cycloprop[e]azulene, 1a,2	--	--	--	--	100.0 NJ	--	150.0 NJ	--	--
2(1H)-naphthalene, 4a,5,6,	--	--	--	--	--	--	610.0 NJ	--	--
2(1H)-phenanthrenone, 3,4,4A	--	--	--	--	--	710.0 NJ	--	--	--
4H-cyclopenta[def]phenanthre	--	110.0 NJ	--	--	--	280.0 NJ	--	--	--
8-Hexadecyne	--	--	--	--	--	--	530.0 NJ	--	--
Anthracene, 2-methyl-	--	--	--	130.0 NJ	160.0 NJ	140.0 NJ	--	--	--
Aspidofractinine, 3-methylen	--	--	--	94.0 NJ	--	--	--	--	--
Azulene, 1,2,3,4,5,6,7,8-oct	--	--	--	--	--	--	250.0 NJ	--	--
Benzo[a]pyrene	--	--	--	--	280.0 NJ	--	--	--	--
Benzo[k]fluoranthene	--	--	--	--	500.0 NJ	--	--	--	--
Butanoic acid, 3-hydroxy-, M	--	--	--	--	--	350.0 NJ	--	--	--
Chrysene, 6-methyl-	--	--	--	--	97.0 NJ	--	--	--	--
Cycloheptane, methyl-	--	--	--	--	--	--	380.0 NJ	--	--
Cyclopropa[d]naphthalen-2(4a	--	--	--	--	--	--	370.0 NJ	--	--
Docosane	--	--	--	330.0 NJ	--	--	--	--	--
Dodecane, 2,6,10-trimethyl-	--	--	--	--	--	--	270.0 NJ	--	--
Ether, methyl 1-tetradecenyl	--	--	--	--	530.0 NJ	--	--	--	--
Fluoranthene	--	--	--	--	130.0 NJ	--	--	--	--
Hexadecanoic acid	--	--	--	--	--	420.0 NJ	--	--	--
Hexatriacontane	--	--	--	170.0 NJ	--	--	--	--	--
Lycopodan-5-one, 12-hydroxy-	--	--	--	--	230.0 NJ	--	--	--	--
Naphthalene, 2- (phenylmethyl	--	--	--	--	--	570.0 NJ	--	--	--
Naphthalene, 2-phenyl-	--	--	--	98.0 NJ	100.0 NJ	--	--	--	--
Nonacosane	--	--	--	--	--	3500.0 NJ	--	--	--
Nonadecane	--	--	--	260.0 NJ	--	--	--	--	--
Nonadecanol	--	--	--	--	--	420.0 NJ	--	--	--
Octadecanal	--	--	--	--	--	3030.0 NJ	--	--	--
Oxirane, hexadecyl-	140.0 NJ	--	--	1640.0 NJ	510.0 NJ	7480.0 NJ	150.0 NJ	--	--
Oxirane, tetradecyl-	--	190.0 NJ	--	--	--	--	--	--	--
Pentadecanal	--	--	--	--	--	--	96.0 NJ	--	--
Pentane, 1,1'-oxybis-	--	--	--	--	--	600.0 NJ	--	--	--
Pentatriacontane	--	--	--	--	--	3660.0 NJ	--	--	--
Phenanthrene, 2,5-dimethyl-	--	--	--	--	330.0 NJ	--	--	--	--
Phenanthrene, 3-methyl-	--	--	--	--	130.0 NJ	--	--	--	--
Pyrene, 1-methyl-	--	--	--	--	254.0 NJ	--	--	--	--
Tetratetracontane	--	--	--	--	770.0 NJ	300.0 NJ	--	--	--
Tetratriacontane	--	--	--	--	460.0 NJ	--	110.0 NJ	--	--
Triphenylene, 2-methyl-	--	--	--	--	150.0 NJ	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg

SITE NAME ROCKFORD SAND & GRAVEL
ILO NUMBER 000034371

TABLE 8
KEY SAMPLE SUMMARY
(Residential Wells)

SAMPLING POINT / PARAMETER	G201 11/28/2000 (Background)	G202 11/28/2000	G203 11/29/2000	G204 11/29/2000	G205 11/29/2000	G206 11/29/2000	G207 11/29/2000	TACO Tier 1 Class 1 Groundwater	MCL's
VOLATILES									
Vinyl Chloride	--	--	--	--	--	--	0.6 J	2.0	--
1,1-Dichloroethane	--	--	--	--	--	--	2.0	700.0	--
Chloroform	--	--	--	--	--	--	0.7 J	0.02	--
cis-1,2-Dichlorethene							11.0	70.0	--
Trichloroethene	--	--	--	--	1.0	1.0	0.8 J	5.0	5.0
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
SEMIVOLATILES									
None detected	--	--	--	--	--	--	--	--	--
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PESTICIDES									
None detected	--	--	--	--	--	--	--	--	--
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
INORGANICS									
Cadmium	--	--	0.3 M	--	--	--	--	5.0	5.0
Copper	14.1	--	--	--	--	75.8	--	650.0	--
Iron	18.2 BJ	--	--	--	--	416.0	--	5000.0	1000.0
Lead	--	--	2.0 MD	--	--	20.0 D	--	7.5	--
Manganese	0.9 M	--	--	--	--	22.9	45.9	150.0	150.0
Nickel	1.3 MB	--	--	--	5.0 BJ	--	--	100.0	100.0
PH	--	--	--	--	--	--	--	--	--
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

TACO values are based on the Illinois Environmental Protection Agency's Tiered Approach to Corrective Action Objectives. The objectives presented in this table are based on Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route.

TABLE 9
Soil/Sediment samples
1994 CERCLA Inspection

Sample Date Time	Depth	Location	Appearance
X101 11/03/94 15:45	2" to 4"	Background sample collected at Blackhawk Park, located approximately 1.4 miles north of the Rockford Sand and Gravel property.	Black organic loam.
X102 11/03/94 12:50	3" to 6"	Collected 143 feet north and 11 feet west of the northeast corner of the Laidlaw property.	Black, cinders and dark soil.
X103 11/03/94 12:20	6" to 12"	Collected 105 feet west and 94 feet south of monitoring well G104.	Black loam with garbage.
X104 11/03/94 11:30	12" to 24"	Collected approximately 656 feet east of the west side of the Laidlaw fence and approximately 440 feet north of Simpson Road.	Black silty sand.
X105 X106 11/03/94 10:30	2" to 6'	Collected 84 feet west of monitoring well G101 and 60 feet south of the fence along the north edge of the property. Duplicate sample X106 also collected at this location.	Brown silty sand.
X107 11/03/94 10:10	8" to 12"	Collected approximately 87 feet south of monitoring well G106/G107, along the west end of thicket.	Brown sandy clay to 8"; brown sand, some clay to 12".
X108 11/03/94 09:10 AM	8" to 12"	Collected approximately 173 feet south of monitoring well G105, along the west end of thicket.	Brown/black sandy clay.
X201 11/03/94 15:30	1" to 4"	Collected along the Rock River at Blackhawk Park, approximately 1.4 miles north of the Rockford Sand and Gravel property, 202 feet south of the boat ramp.	Black sandy clay.
X202 X203 11/03/94 08:40	0" to 4"	Sample X202 and duplicate X203 collected along the Rock River approximately 212 feet north of Simpson Road.	Black/brown sandy silt.
X204 11/03/94 07:50	0" to 3"	Collected along the Rock River approximately 79 feet north of the southwest corner of the north island located east of Rockford Sand and Gravel Number 2.	Black/brown sandy silt.

TABLE 10
Groundwater Sample Description
1994 CERCLA Inspection

Sample Date Time	Depth	Location	Appearance
G201 G202 11/03/94 13:40	75 feet	Background sample G201 and duplicate G202 was obtained from a residential well located approximately 400 feet north of the Rockford Sand and Gravel property. Sample was not split with consultants.	Clear, no odor.
G101 11/02/94 12:50	49.9 feet	Monitoring well located near the northeast corner of the property. Sample split with consultants.	Cloudy, no odor.
G102 11/02/94 17:00	36.8 feet	Monitoring well located near the southeast corner of the property. Sample split.	Cloudy, no odor.
G103 11/02/94 09:50	64.9 feet	Monitoring well located near the northwest corner of the property, approximately 250 feet north of Laidlaw and 150 feet east of South Main Street. Sample split.	Cloudy, no odor.
G104 11/02/94 11:15	34.5 feet	Monitoring well located near he north edge of the property approximately halfway between the west and east borders of the property. Sample split.	Cloudy, no odor.
G105 11/02/94 15:50	26.9 feet	Monitoring well located approximately 350 feet north of the southeast corner of the property. Sample split.	Cloudy, no odor.
G106 G107 11/02/94 14:40	25.6 feet	Monitoring well located near the eastern edge of he property, approximately halfway between the north and south borders of the property. Duplicate sample G107 was also obtained at this location. Sample split.	Cloudy, no odor.

SITE NAME: ROCKFORD SAND & GRAVEL
ILO NUMBER: 000034371

TABLE 11
Key Samples
1994 CERCLA Inspection
(Soil)

SAMPLING POINT	X101	X102	X103	X104	X105	X106	X107	X108
	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94	11-3-94
PARAMETER	(Background)							
VOLATILES								
Acetone	12.00 U	--	39.00 B	--	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
SEMIVOLATILES								
Phenanthrene	260.00 J	1000.00	--	--	--	--	--	1300.00
Anthracene	50.00 J	230.00 J	--	--	--	--	--	260.00 J
Fluoranthene	380.00 J	1800.00	1200.00	--	--	--	--	2500.00
Pyrene	420.00	2100.00	--	--	--	--	--	2400.00
Benzo(a)anthracene	240.00 J	960.00	--	--	--	--	--	1500.00
Chrysene	230.00 J	770.00	--	--	--	--	--	1200.00
Benzo(b)fluoranthene	200.00 J	--	--	--	--	--	--	1800.00
Benzo(k)fluoranthene	200.00 J	1500.00	1100.00	820.00	980.00	770.00	630.00	--
Benzo(a)pyrene	180.00 J	560.00	--	--	--	--	--	900.00
Indeno(1,2,3-cd)pyrene	120.00 J	--	--	--	370.00 J	--	--	1000.00
Benzo(g,h,i)perylene	140.00 J	--	420.00	--	--	--	--	980.00 B
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
TENTATIVELY IDENTIFIED COMPOUNDS								
Sulfur, mol. (S8)	--	14000.00 NJ	1200.00 NJ	3000.00 J	--	--	--	--
Maneb	--	6600.00 NJ	--	--	--	--	230.00 NJ	--
Phytol	--	--	--	--	--	160.00 NJ	--	--
Stigmast-4-en-3-one	--	--	--	--	--	460.00 NJ	--	--
Naphthalene, 1-methyl-	--	--	--	--	--	--	78.00 NJ	--
Benzo[b]naphtho[2,1-d]thioph	--	--	--	--	--	--	--	310.00 NJ
7H-Benz[de]anthracen-7-one	--	--	--	--	--	--	--	240.00 NJ
Benzo[e]pyrene	--	--	--	--	--	--	--	950.00 NJ
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
PESTICIDES								
Endosulfan I	2.00 U	--	2.10 P	6.90	--	--	--	--
Dieldrin	3.90 U	--	--	--	--	--	--	5.20 P
4,4'-DDE	3.90 U	--	7.40 DJ	--	--	--	--	--
Endrin	3.90 U	--	6.20 JPD	--	--	--	--	--
Endosulfan sulfate	3.90 U	--	21.00 DJ	11.00 JPD	--	--	--	15.00 JPD
Endrin aldehyde	6.90 P	23.00 P	--	--	80.00 PD	--	--	--
4,4'-DDT	3.90 U	--	7.60 P	--	--	--	--	--
Endrin Ketone	3.90 U	--	5.30 P	--	--	--	--	--
alpha-Chlorodane	2.00 U	--	3.00	6.00	--	--	--	--
gamma-Chlorodane	2.00 U	--	2.10 P	6.80 P	--	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
INORGANICS								
Arsenic	2.50	--	--	--	--	--	--	8.90
Calcium	11100.00	85200.00	--	58100.00	57700.00	--	--	--
Lead	24.80	141.00	--	--	--	--	--	--
Magnesium	6370.00	43000.00	--	32300.00	33900.00	--	--	--
Sodium	49.80 B	--	--	228.00 B	--	--	--	--
Cyanide	0.60 U	--	--	--	--	--	0.70	--
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

SITE NAME: ROCKFORD SAND & GRAVEL
ILO NUMBER: 000034371

TABLE 12
Key Samples
1994 CERCLA Inspection
(Sediment)

SAMPLING POINT	X201	X202	X203	X204
	11-3-94	11-3-94	11-3-94	11-3-94
PARAMETER	(Background)			
VOLATILES				
NONE DETECTED				
SEMIVOLATILES				
Anthracene	150.00	--	--	--
Benzo(k)fluoranthene	420.00 U	860.00	--	--
Benzo(a)pyrene	610.00	--	--	--
Benzo(g,h,i)perylene	380.00	--	--	--
	ug/Kg	ug/Kg	ug/Kg	ug/Kg
TENTATIVELY IDENTIFIED COMPOUNDS				
.gamma.-Sitosterol		2100.00 NJ	2600.00 NJ	--
Sulfur, mol. (S8)	--	4000.00 NJ	4000.00 NJ	7400.00 NJ
Phytol	--	--	410.00 NJ	--
Stigmast-4-en-3-one	--	--	1300.00 NJ	--
2-Pentanone, 4-hydroxy-4	14000.00 NJA	--	--	--
Benzo[e]pyrene	920.00 NJ	--	550.00 NJ	300.00 NJ
	ug/Kg	ug/Kg		ug/Kg
PESTICIDES				
Endrin	4.40 U	--	6.50 JPD	11.00 JPD
Endosulfan sulfate	11.00 JPD	--	19.00 JPD	35.00 JPD
4,4'-DDT	4.40 U	4.60 P	--	--
	ug/Kg	ug/Kg		ug/Kg
INORGANICS				
Cadmium	1.60	--	7.90	--
Selenium	0.98 U	--	--	2.30
Silver	0.53 U	--	0.74 B	--
Cyanide	0.66 U	1.70	--	--
	mg/Kg	mg/Kg	mg/Kg	mg/Kg

SITE NAME: ROCKFORD SAND & GRAVEL
ILO NUMBER: 000034371

TABLE 13
Key Samples
1994 CERCLA Inspection
(Groundwater)

SAMPLING POINT	G201	G101	G102	G103	G104	G105	G106	G107
	11-2-94	11-2-94	11-2-94	11-2-94	11-2-94	11-2-94	11-2-94	11-2-94
PARAMETER	(Background)							
VOLATILES								
1,1-Dichloroethane	1.00 U	--	8.00 J	--	--	--	--	--
1,2-Dichloroethene(total)	1.00 U	--	3.00 J	--	--	--	--	--
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
SEMIVOLATILES								
bis(2-Ethylhexyl)phthalate	2.00 J	34.00 B	35.00 B	--	--	56.00 B	--	150.00 BD
Indeno(1,2,3-cd)pyrene	5.00 U	--	--	--	--	--	--	6.00 JD
Benzo(g,h,i)perylene	5.00 U	--	--	--	--	--	--	6.00 JD
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
TENTATIVELY IDENTIFIED COMPOUNDS								
Caprolactum	--	--	10.00 NJ	--	--	43.00 NJ	24.00 NJ	120.00 NJD
2(3H)-Benzothiazolone	--	--	7.00 NJ	--	--	--	7.00 NJ	7.00 NJ
Sulfur, mol. (S8)	--	--	9.00 NJ	--	--	--	120.00 NJ	97.00 NJ
Ether, sec-butyl isopropyl	--	--	--		5.00 NJ	--	--	--
Benzene, 1,4-dichloro-	--	--	--	--	--	--	4.00 NJ	5.00 NJ
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PESTICIDES	NONE DETECTED.							
INORGANICS								
Aluminum	80.00 U	263.00	144.00 B	222.00	152.00 B	–	--	--
Arsenic	2.00 U	--	14.50	--	--	--	23.60	21.50
Barium	73.00	--	255.00	--	247.00	275.00	249.00	245.00
Cadmium	0.20 U	--	--	--	--	4.50 B	--	--
Iron	101.00	--	6350.00	--	--	857.00	6230.00	6180.00
Manganese	6.00	--	196.00	--	1090.00	2030.00	260.00	256.00
Potassium	5000.00 U	--	41400.00	--	--	--	--	--
Zinc	40.00 U	--	--	41.40	--	--	--	--
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

APPENDIX A

SITE 4-MILE RADIUS MAP

ROCKFORD SAND and GRAVEL

SDMS US EPA Region V

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4-MILE RADIUS MAP

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APPENDIX B

15-MILE SURFACE WATER MAP

ROCKFORD SAND and GRAVEL

SDMS US EPA Region V

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15-MILE SURFACE WATER MAP

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APPENDIX C

TARGET COMPOUND LIST AND DATA QUALIFIERS

ROCKFORD SAND and GRAVEL

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chlorde	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroehtene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene

2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobolt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICS) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values are flagged with the "D" flag.	Not used.
E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference.
A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
M	Not used.	Duplicate injection (a QC parameter not met).

N	Not used	Spiked sample (a QC parameter not met).
S	Not used.	The reported value was determined by the Method of Standard Additions (MSA).
W	Not used.	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
*	Not used.	Duplicate analysis (a QC parameter not within control limits).
+	Not used.	Correlation coefficient for MSA (a QC parameter) is less than 0.995.
P	Not used.	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
CV	Not used.	Method qualifier indicates analysis by Cold Vapor AA.
AV	Not used.	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not used.	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
T	Not used.	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

APPENDIX D

IEPA SITE PHOTOGRAPHS

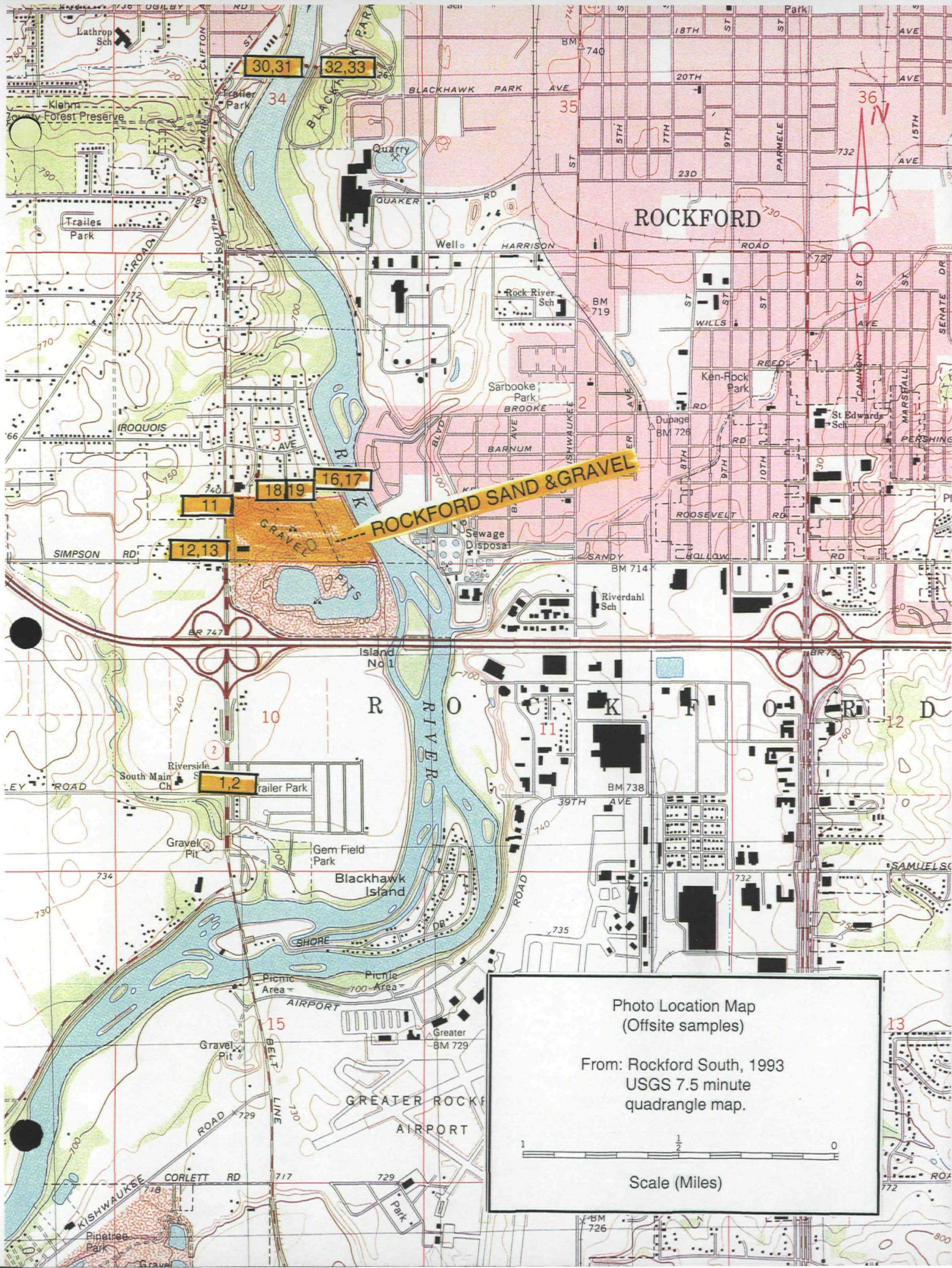
ROCKFORD SAND and GRAVEL

FIGURE 3

Aerial Photograph

Scale: one inch equals approximately 200 feet.

From: Illinois Department of Transportation photo taken on April 14, 1998.


30,31
32,33
16,17
18,19
11
12,13
1,2
ROCKFORD SAND &GRAVEL
ROCKFORD
Lathrop Sch
Klehm Forest Preserve
Trailer Park
Quarry
Well
Rock River Sch
Sarbooke Park
Ken-Rock Park
St Edwards Sch
Dupage BM 726
Sewage Disposal
Riverdahl Sch
Island No 1
Riverside Sch
South Main Ch
Gravel Pit
Gem Field Park
Blackhawk Island
Picnic Area
Greater BM 729
GREATER ROCKF
AIRPORT
Pipetree Park
Park
BM 740
BM 719
BM 714
BM 738
BM 726
Photo Location Map
(Offsite samples)
From: Rockford South, 1993
USGS 7.5 minute
quadrangle map.
1
1/2
0
Scale (Miles)

APPENDIX E

ANALYTICAL RESULTS (Volume 2)

ROCKFORD SAND and GRAVEL

Expanded Site Inspection Photos

DATE: 11-28-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 11:00	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: East.

Photo Number 1.

Sample G201/G202. is a background and duplicate drinking water sample.

DATE: 11-28-2000

TIME: 11:00

PHOTOGRAPH TAKEN BY: R. CASPER

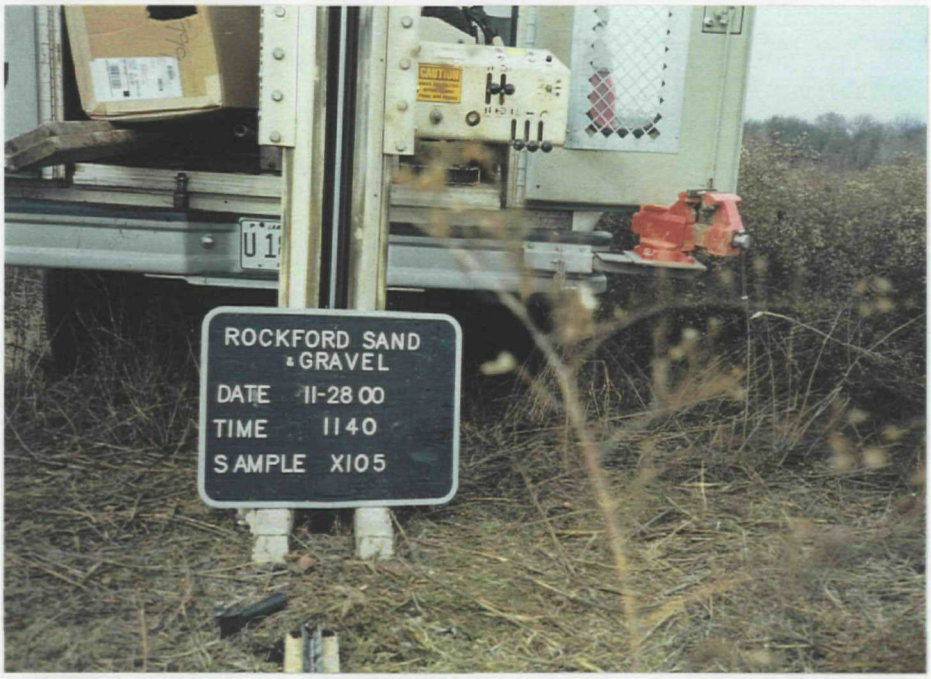
COMMENTS: Picture taken toward: South.

Photo Number 2.

Sample G201/G202. The sample was collected from an 87 feet deep well at a trailer park .8 mile south.

Expanded Site Inspection Photos

DATE: 11-28-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 11:40	SITE NAME: Rockford Sand & Gravel
PHOTOGRAPH TAKEN BY: R. Casper	
COMMENTS: Picture taken toward: West.	
Photo Number 3.	
Sample X105 was	
collected onsite	
in the southeast	
area of the	
property.	



DATE: 11-28-2000
TIME: 10:40
PHOTOGRAPH TAKEN BY: R. CASPER
COMMENTS: Picture taken toward: North.
Photo Number 4.
Sample X105. The
sample was collect-
ed with the Geo-
Probe at a depth
of 18 to 20 feet.

Expanded Site Inspection Photos

DATE: 11-28-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 13:00	SITE NAME: Rockford Sand & Gravel
PHOTOGRAPH TAKEN BY: R. Casper	
COMMENTS: Picture taken toward: West.	
Photo Number 5.	
Sample X104 was	
collected at the	
east-central area	
of the property.	

DATE: 11-28-2000
TIME: 13:00
PHOTOGRAPH TAKEN BY: R. CASPER
COMMENTS: Picture taken toward: North.
Photo Number 6.
Sample X104. The
sample was collect-
ed with the Geo-
Probe at a depth
of 2 to 8 feet.

Expanded Site Inspection Photos

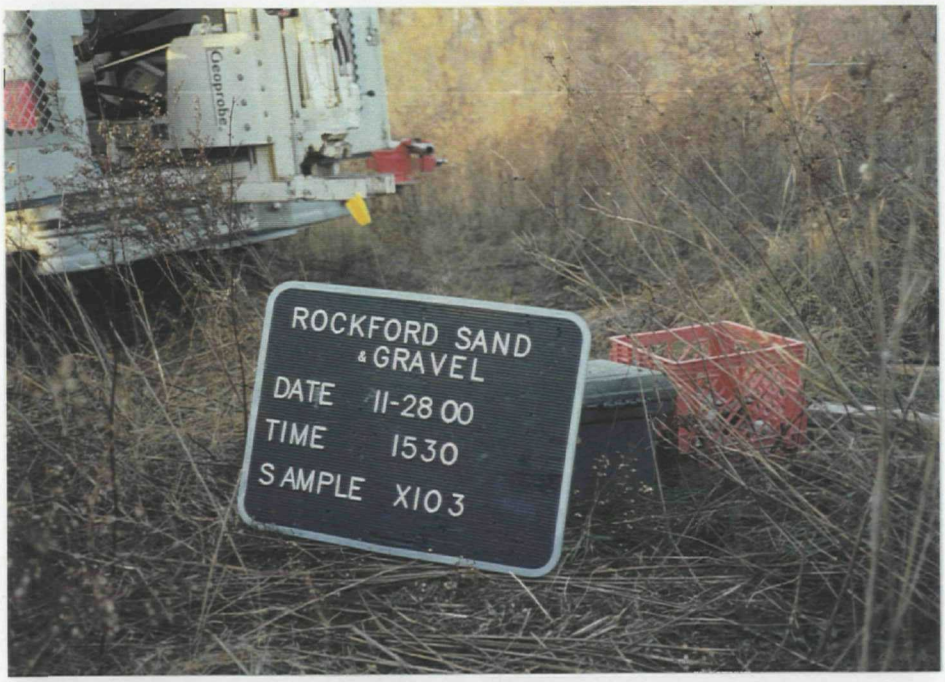
DATE: 11-28-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 15:30	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: North.

Photo Number 7.

Sample X103 was collected near the north-central area of the property.



DATE: 11-28-2000

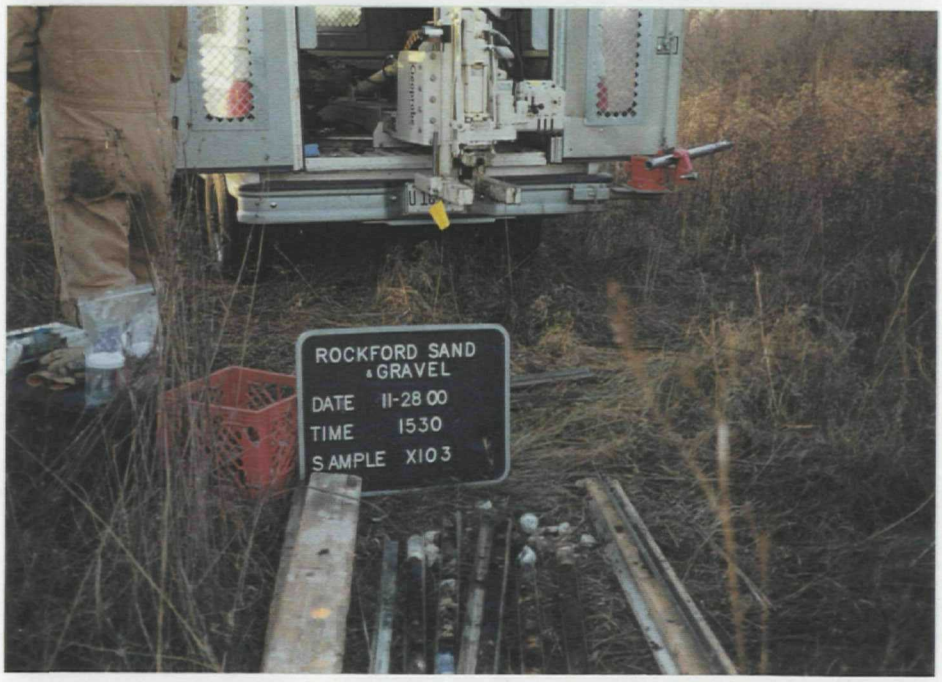
TIME: 15:30

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 8.

Sample X103. The sample was collected with the Geo-Probe at a depth of 16 to 20 feet.



Expanded Site Inspection Photos

DATE: 11-28-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 16:30	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: South.

Photo Number 9.

Sample X106 was collected near the northwestern area of the property.

DATE: 11-28-2000

TIME: 16:30

PHOTOGRAPH TAKEN BY: R. CASPER

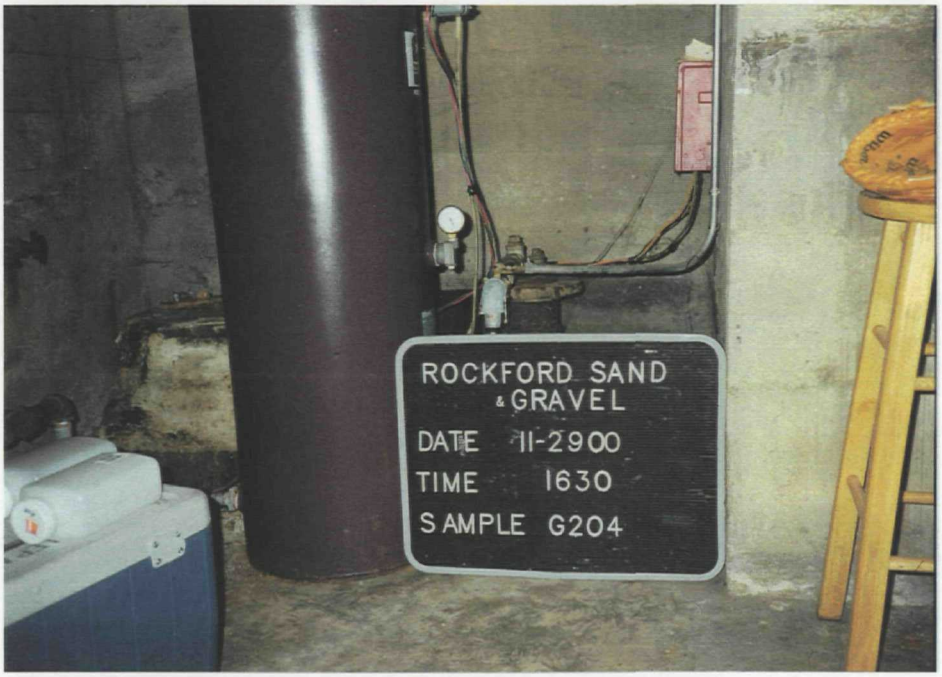
COMMENTS: Picture taken toward: East.

Photo Number 10.

Sample X106. The sample was collected with the Geo-Probe at a depth of 8 to 12 feet.

Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 9:00	SITE NAME: Rockford Sand & Gravel
PHOTOGRAPH TAKEN BY: R. Casper	
COMMENTS: Picture taken toward: West.	
Photo Number 11.	
Sample G204 was	
collected at a	
private residence	
west of the site.	
(Note: time on photo is incorrect)	



Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 10:00	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: West.

Photo Number 12.

Sample G203 was collected at a private residence located west of the site.

DATE: 11-29-2000

TIME: 10:00

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 13.

Sample G203. The sample was collected from an outside tap after water parameters had stabilized.

Expanded Site Inspection Photos

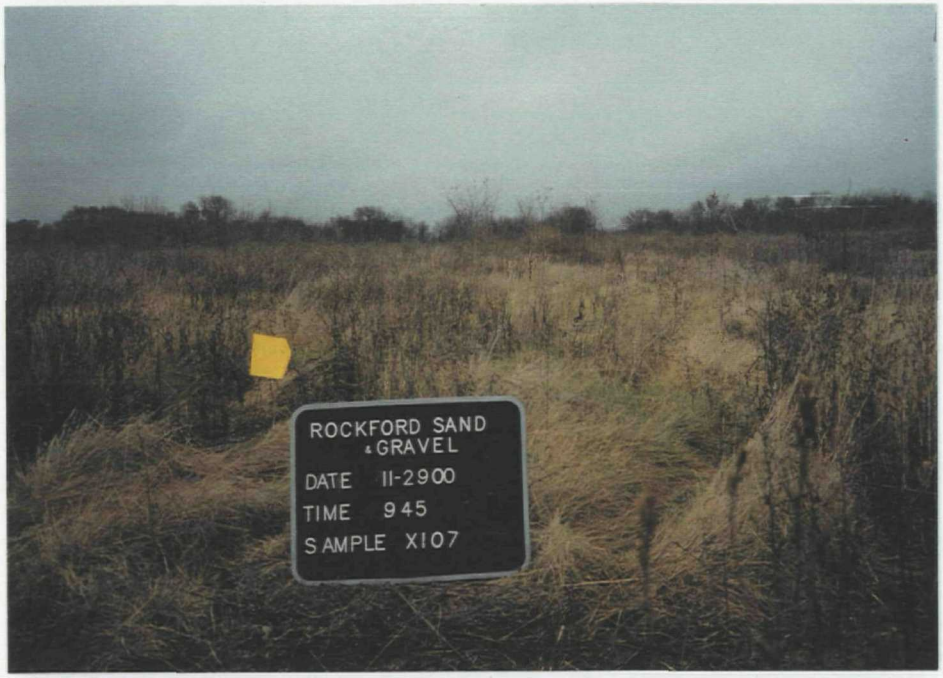
DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 9:45	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: North.

Photo Number 14.

Sample X107 was collected at the southwestern area of the property.



DATE: 11-29-2000

TIME: 9:45

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 15.

Sample X107. The sample was collected at a depth of 6 to 8 feet.

Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 11:00	SITE NAME: Rockford Sand & Gravel
PHOTOGRAPH TAKEN BY: R. Casper	
COMMENTS: Picture taken toward: East.	
Photo Number 16.	
Sample G207 was	
collected from a	
private residence	
located north of	
the site.	

DATE: 11-29-2000
TIME: 11:00
PHOTOGRAPH TAKEN BY: R. CASPER
COMMENTS: Picture taken toward: West.
Photo Number 17.
Sample G207. The
sample was collect-
ed from an outside
tap after water
parameters had
stabilized.

Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 11:30	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: South.

Photo Number 18.

Sample G206 was collected from an inside tap from a residence located north of the site.

DATE: 11-29-2000

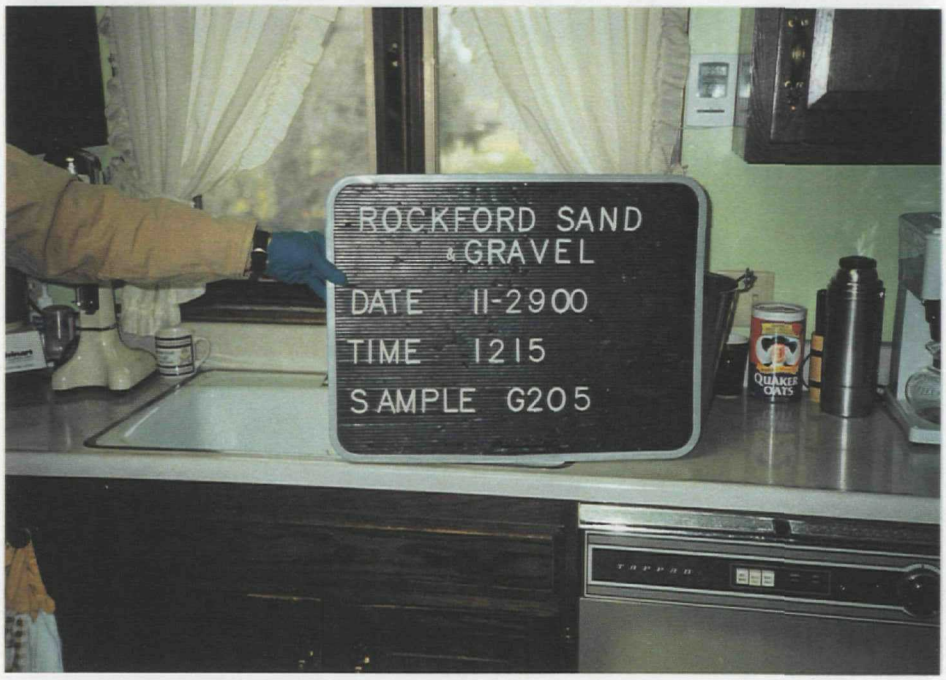
TIME: 12:15

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: East.

Photo Number 19.

Sample G205 was collected from an inside tap from a private residence located north of the site.



Expanded Site Inspection Photos

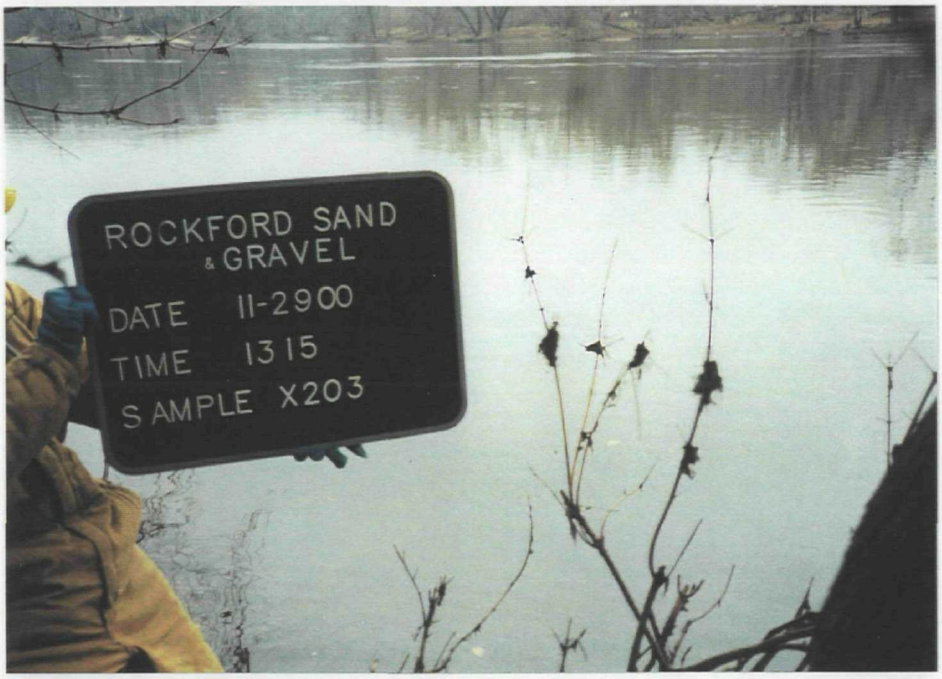
DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 13:15	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: North.

Photo Number 20.

Sediment sample X203 was collected from the east side of the property in the Rock River.



DATE: 11-29-2000

TIME: 13:15

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 21.

Sample X203. The sample consisted of sand, gravel and some silt collected at a depth of 1 to 8 inches.

Expanded Site Inspection Photos

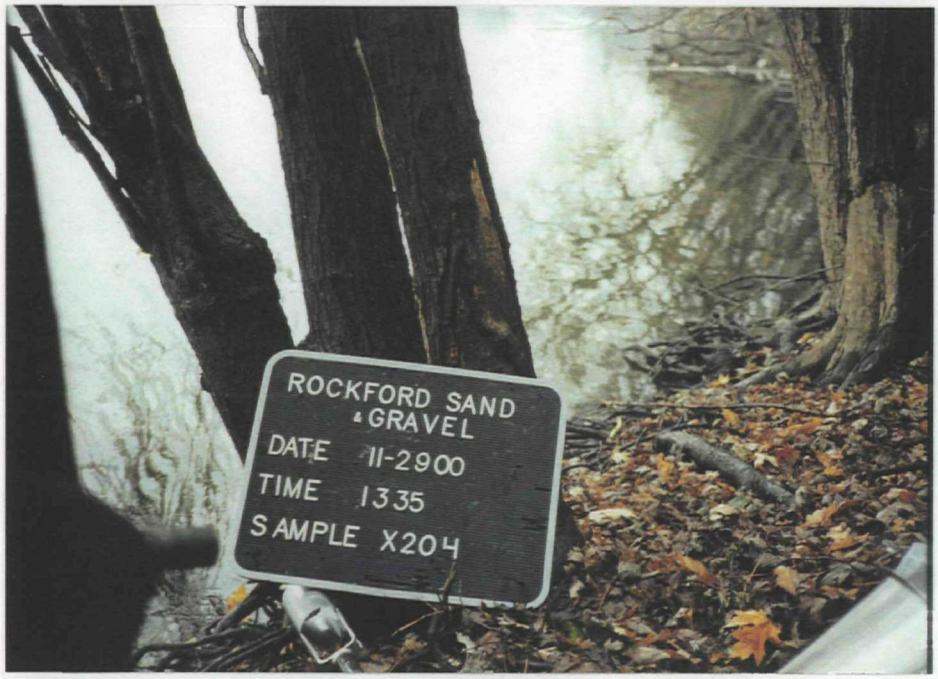
DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 13:35	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: South.

Photo Number 22.

Sediment sample X204 was collected from the east side of the property in the Rock River.



DATE: 11-29-2000

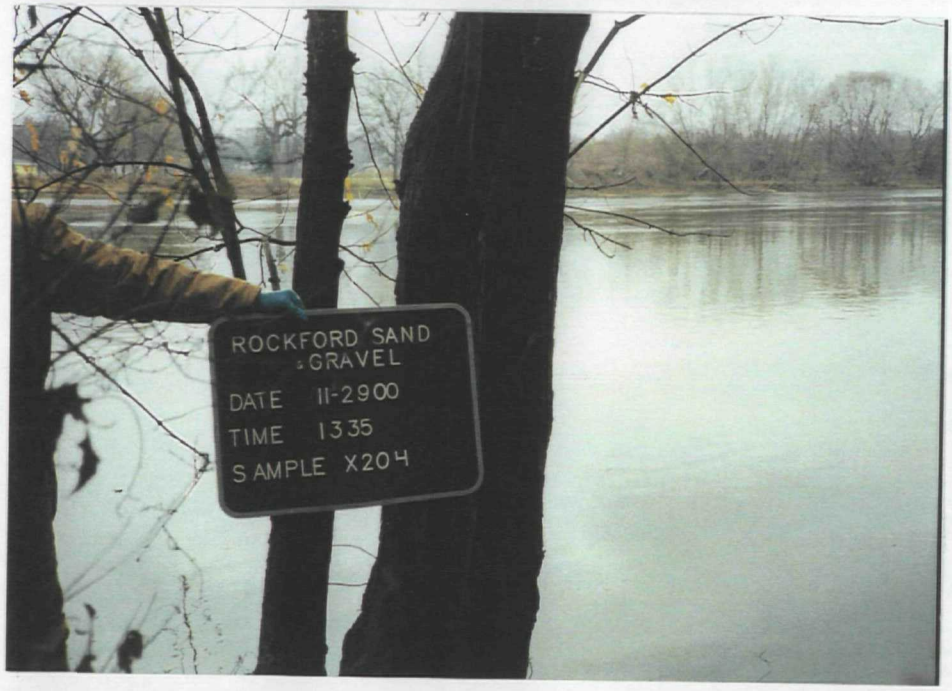
TIME: 13:35

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: East.

Photo Number 23.

Sample X204. The sample consisted of black silt with organic matter collected at a depth of 1 to 8 inches.



Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 14:00	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: East.

Photo Number 24.

Sediment sample X205 was collected from the east side of the property in the Rock River.

DATE: 11-29-2000

TIME: 14:00

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 25.

Sample X205. The sample consisted of black silt with organic matter collected at a depth of 1 to 8 inches.

Expanded Site Inspection Photos

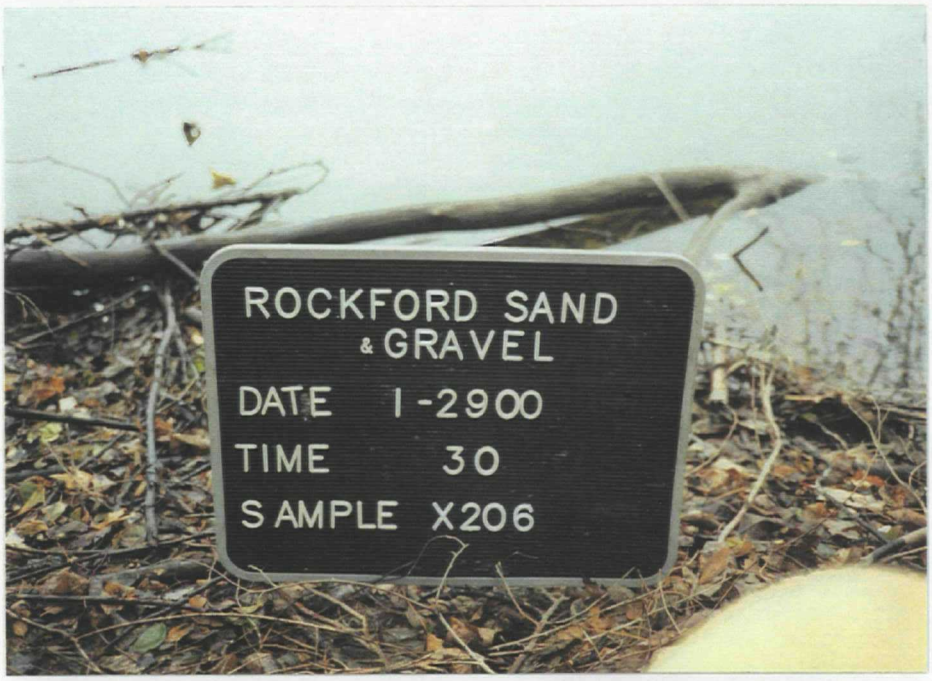
DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 14:30	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: East.

Photo Number 26.

Sediment sample X206 was collected from the east side of the property in the Rock River.



DATE: 11-29-2000

TIME: 14:30

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 27.

Sample X206. The sample consisted of black silt with organic matter collected at a depth of 1 to 8 inches.

Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 15:00	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: South.

Photo Number 28.

Sediment sample X207 was collected from the east side of the property in the Rock River.

DATE: 11-29-2000

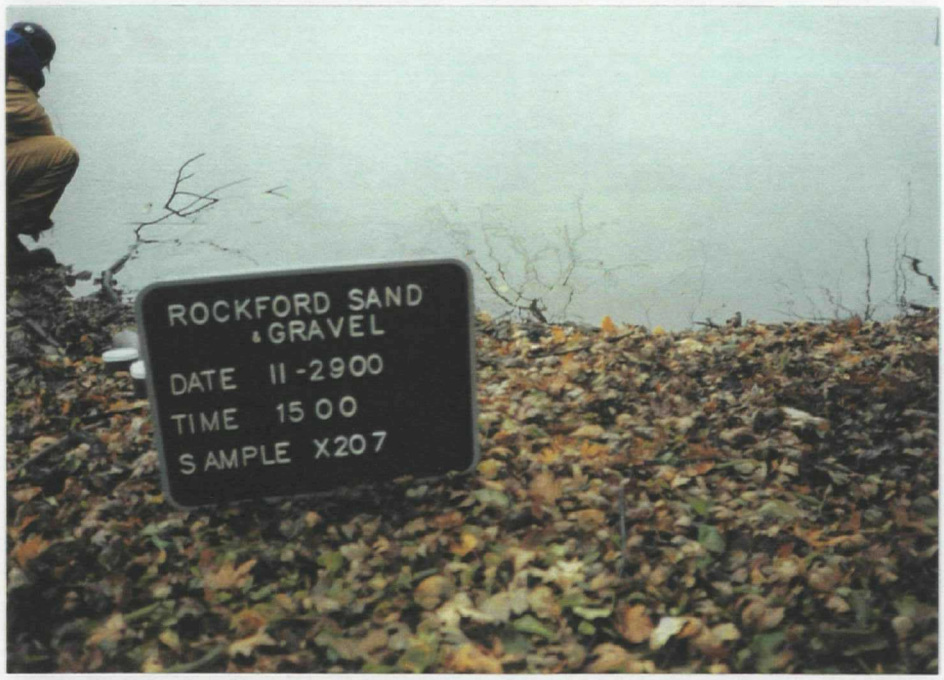
TIME: 15:00

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: East.

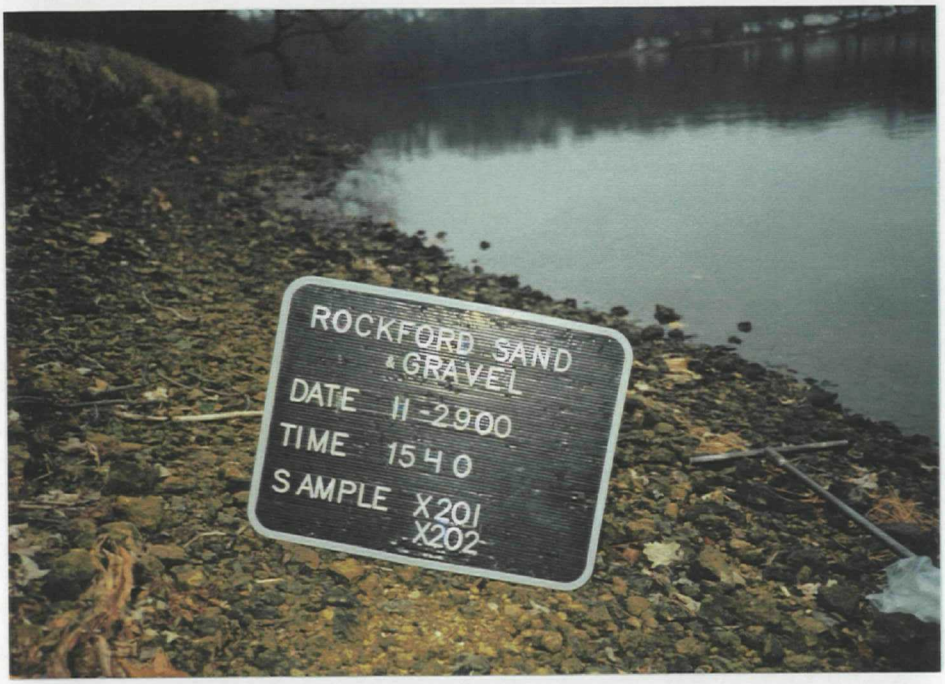
Photo Number 29.

Sample X207. The sample consisted of grey sand and gravel /w silt collected at a depth of 1 to 8 inches.

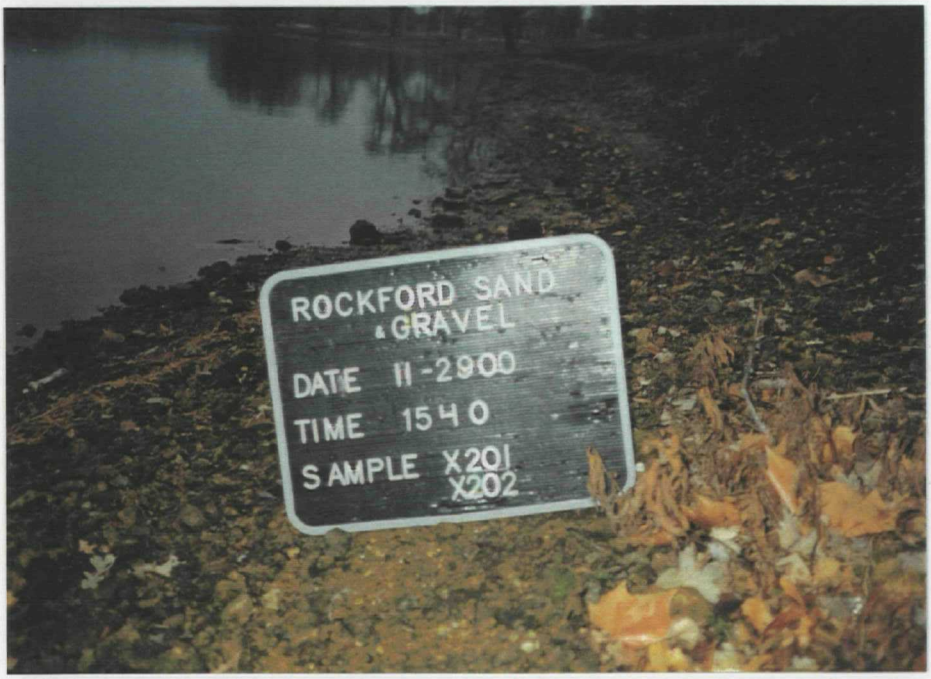


Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 15:40	SITE NAME: Rockford Sand & Gravel
PHOTOGRAPH TAKEN BY: R. Casper	
COMMENTS: Picture taken toward: South.	
Photo Number 30.	
Sediment sample	
X201/X202 is a	
background and	
duplicate sample.	



DATE: 11-29-2000
TIME: 15:40
PHOTOGRAPH TAKEN BY: R. CASPER
COMMENTS: Picture taken toward: South.
Photo Number 31.
Sample X201/X202.
The sample was
collected from
Blackhawk Park,
located approx. 1.4
miles north of site



Expanded Site Inspection Photos

DATE: 11-29-2000	SITE ILO#: 000034371 COUNTY: Winnebago
TIME: 15:50	SITE NAME: Rockford Sand & Gravel

PHOTOGRAPH TAKEN BY: R. Casper

COMMENTS: Picture taken toward: East.

Photo Number 32.

Soil sample

X101/X102 is a

background and

duplicate sample.

DATE: 11-29-2000

TIME: 15:50

PHOTOGRAPH TAKEN BY: R. CASPER

COMMENTS: Picture taken toward: South.

Photo Number 33.

Sample X101/X102.

The sample was

collected from

Blackhawk Park,

located approx. 1.4

miles north of site